

# School of Public Health

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## Overview

The mission of the School of Public Health is to develop and apply knowledge from multiple disciplines for the promotion and protection of the health of the human population, giving due consideration to principles of human rights and cultural perspectives that abound in this multicultural country and world. The school carries out this mission with programs of teaching, research, and service. These programs, grounded in an understanding of the theory and mechanisms of the basic sciences, are integrated through a focus on communities that reach from the neighborhoods surrounding the campus to international settings.

Promotion and protection of the health of human populations require a scientific understanding of epidemiology, biostatistics, the biological, physical, environmental, social, behavioral, informational, and administrative, and policy sciences. In the School of Public Health, these and other disciplines focus on health problems of particular populations, selected diseases or disabilities, and issues associated with the application of resources to public health systems. Faculty, support resources, and curricula focus on both the fundamental disciplines and their applications to particular problems. Within the University and the wider community, faculty strive to advance the understanding of the fundamental disciplines, apply them to problems faced by human populations, and provide the interdisciplinary context in which future public health practitioners and scholars may develop needed skills and capacities.

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; Epidemiology/Biostatistics; Health and Social Behavior; Health Policy and Management; Health Services and Policy Analysis; Infectious Diseases and Vaccinology; Interdisciplinary; Maternal and Child Health; and Public Health Nutrition. The Doctor of Public Health (DrPH) 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 the public health practice.

## Undergraduate Program

Public Health (<http://guide.berkeley.edu/archive/2017-18/undergraduate/degree-programs/public-health>): BA (offered under the jurisdiction of the College of Letters and Science), Summer Minor

## Graduate Programs

Public Health: (<http://guide.berkeley.edu/archive/2017-18/graduate/degree-programs/public-health>) MPH (Master of Public Health), DrPH (Doctor of Public Health)

## Public Health

### PB HLTH 14 Healthy People: Introduction to Health Promotion 4 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014

Introduction to personal and community health, drawing on physical and social sciences. Specific areas include stress, alcohol and drugs, nutrition, exercise, the environment, communication, and sexuality. Readings, lectures, and discussions explore key issues for students and examine those issues in the context of contemporary American society. Public health approaches to disease prevention and health promotion are explored for each topic.

Healthy People: Introduction to Health Promotion: Read More [+]

#### 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/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Kodama

Healthy People: Introduction to Health Promotion: Read Less [-]

### PB HLTH 15 Introduction to Global Health Equity 3 Units

Terms offered: Spring 2018, Spring 2017

This seminar provides an overview of the intersection between global health and social justice, with a specific focus on the ways in which inequity, specifically the conditions that lead to poverty, disproportionately affect health outcomes. Students will learn about the historical and theoretical underpinnings of global health, how social determinants affect medical outcomes and health policy, the principles of international law and health economics, and the structure of health delivery models. In the process, students will engage in topics related to social factors that impact health, including class, race, gender, and poverty. Class discussions will address contemporary global health priorities through the lens of human rights activism.

Introduction to Global Health Equity: Read More [+]

#### 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/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** LE

Introduction to Global Health Equity: Read Less [-]

## PB HLTH 98 Directed Group Study 1 - 4 Units

Terms offered: Spring 2016, Fall 2015, Spring 2015

Directed Group Study: Read More [\[+\]](#)

### Rules & Requirements

**Credit Restrictions:** Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.

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

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-4 hours of directed group study per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

Directed Group Study: Read Less [\[-\]](#)

## PB HLTH 99 Supervised Independent Study 1 - 4 Units

Terms offered: Spring 2016, Fall 2015, Spring 2015

Supervised Independent Study: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Consent of instructor

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-4 hours of independent study per week

### Summer:

6 weeks - 2.5-10 hours of independent study per week

8 weeks - 1.5-7.5 hours of independent study per week

10 weeks - 1.5-6 hours of independent study per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

Supervised Independent Study: Read Less [\[-\]](#)

## PB HLTH 101 A Sustainable World: Challenges and Opportunities 3 Units

Terms offered: Spring 2018

Human activity and human numbers threaten the possibility of irreversible damage to the fragile biosphere on which all life depends. The current generation of students is the first one to face this existential problem and it may be the last one that can solve it. The goal of this course is for faculty with expertise in the many variables involved-energy consumption, food security, population growth and family planning, climate change, governance, migration, resource consumption, etc.-to give one-hour presentations on their specific topic. Teacher Scholars supervised by a GSI will facilitate student discussion groups, who will then prepare brief statements responding to the challenge presented, and suggest ways of ameliorating the problems

A Sustainable World: Challenges and Opportunities: Read More [\[+\]](#)

### 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/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam not required.

**Instructor:** Potts

A Sustainable World: Challenges and Opportunities: Read Less [\[-\]](#)

## PB HLTH C102 Bacterial Pathogenesis 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

This course for upper division and graduate students will explore the molecular and cellular basis of microbial pathogenesis. The course will focus on model microbial systems which illustrate mechanisms of pathogenesis. Most of the emphasis will be on bacterial pathogens of mammals, but there will be some discussion of viral and protozoan pathogens. There will be an emphasis on experimental approaches. The course will also include some aspects of bacterial genetics and physiology, immune response to infection, and the cell biology of host-parasite interactions.

Bacterial Pathogenesis: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** 100, 102 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/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Portnoy

**Also listed as:** MCELLBI C103/PLANTBI C103

Bacterial Pathogenesis: Read Less [\[-\]](#)

## PB HLTH 104A Health Promotion in a College Setting 2 Units

Terms offered: Fall 2016, Fall 2015, Fall 2014

Topics include health promotion, medical self-care, and delivery of health care service. Through a combined theory and practice approach, topics are covered as they apply to the campus community. The course is divided into three sections corresponding to particular campus health field experiences in which students may be involved.

Health Promotion in a College Setting: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** Consent of instructor

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

### Hours & Format

**Fall and/or spring:** 15 weeks - 1.5 hours of lecture and 1 hour of discussion per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

**Instructor:** Kodama

Health Promotion in a College Setting: [Read Less](#) [-]

## PB HLTH 104B Health Promotion in a College Setting 2 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Topics include health promotion, medical self-care, and delivery of health care service. Through a combined theory and practice approach, topics are covered as they apply to the campus community. The course is divided into three sections corresponding to particular campus health field experiences in which students may be involved.

Health Promotion in a College Setting: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** Consent of instructor

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

### Hours & Format

**Fall and/or spring:** 15 weeks - 1.5 hours of lecture and 1 hour of discussion per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

**Instructor:** Kodama

Health Promotion in a College Setting: [Read Less](#) [-]

## PB HLTH 107 Violence, Social Justice, and Public Health 2 Units

Terms offered: Summer 2018 First 6 Week Session, Summer 2017 First 6 Week Session, Summer 2016 10 Week Session

This course addresses violence as a public health issue, using an interdisciplinary public health approach to enable undergraduate students to explore and analyze violence from personal, social, community and political perspectives. Students will learn to apply public health strategies to identify causes of violence and develop practical community-based plans to prevent violence and promote safety. This course will examine violence through the lens of the college campus, paying particular attention to the types of violence more commonly seen on, or associated with, collegiate life, and will include a term paper component.

Violence, Social Justice, and Public Health: [Read More](#) [+]

### Hours & Format

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

**Summer:** 6 weeks - 6 hours of lecture per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam not required.

**Instructor:** Gamble

Violence, Social Justice, and Public Health: [Read Less](#) [-]

## PB HLTH 112 Global Health: A Multidisciplinary Examination 4 Units

Terms offered: Summer 2017 First 6 Week Session, Spring 2016, Spring 2015

This course examines health at the individual and community/global level by examining the interplay of many factors, including the legal, social, political, and physical environments; economic forces; access to food, safe water, sanitation, and affordable preventive/medical care; nutrition; cultural beliefs and human behaviors; and religion; among others. Students will be expected to read, understand, and use advanced materials from diverse disciplines. Class accompanied by case-based discussions.

Global Health: A Multidisciplinary Examination: [Read More](#) [+]

### Rules & Requirements

**Credit Restrictions:** Students who complete PH N112 receive no credit for completing PH 112

### Hours & Format

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

**Summer:** 6 weeks - 9 hours of lecture and 3 hours of discussion per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructors:** Krishnan, Reingold

Global Health: A Multidisciplinary Examination: [Read Less](#) [-]

## PB HLTH N112 Global Health: A Multidisciplinary Examination 4 Units

Terms offered: Summer 2018 First 6 Week Session

This course examines health at the individual and community/global level by examining the interplay of many factors, including the legal, social, political, and physical environments; economic forces; access to food, safe water, sanitation, and affordable preventive/medical care; nutrition; cultural beliefs and human behaviors; and religion; among others. Students will be expected to read, understand, and use advanced materials from diverse disciplines. Class accompanied by case-based discussions.

This class is the Summer Session version of PH 112; same units and content, increased lecture and discussion hours.

Global Health: A Multidisciplinary Examination: [Read More](#) [+]

### Rules & Requirements

**Credit Restrictions:** Students who complete PH 112 receive no credit for completing PH N112.

### Hours & Format

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

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructors:** Reingold, Colford

Global Health: A Multidisciplinary Examination: [Read Less](#) [-]

## PB HLTH 116 Seminar on Social, Political, and Ethical Issues in Health and Medicine 3 Units

Terms offered: Fall 2018, Spring 2018, Fall 2017

This course offers an introduction to issues and perspectives related to health and medicine. Guest lecturers speak about the week's topic, which can include a variety of topics such as public health, violence, chronic illnesses, environmental health, and health care economics. Speakers share their first-hand experiences in their fields, discuss current issues, debate ethical dilemmas, and pose and answer questions. During the weekly discussion sections, students delve deeper into the issues, not only exploring and perhaps questioning their own thoughts and beliefs, but also learning from the experiences and perspectives of their fellow students.

Seminar on Social, Political, and Ethical Issues in Health and Medicine: [Read More](#) [+]

### 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/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam required.

**Instructor:** Potts

Seminar on Social, Political, and Ethical Issues in Health and Medicine: [Read Less](#) [-]

## PB HLTH C117 Introduction to Global Health Disparities Research 2 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

This course is designed to prepare trainees in the UC Berkeley "Minority Health/Global Health" (MH/GH) program to conduct a ten-week infectious disease research project in a disease-endemic country. The course provides a background in neglected tropical disease research, international research ethics, and the conduct of health research in low-resource settings.

Introduction to Global Health Disparities Research: [Read More](#) [+]

### 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/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Reingold

**Also listed as:** INTEGBI C195

Introduction to Global Health Disparities Research: [Read Less](#) [-]

## PB HLTH 118 Nutrition in Developing Countries 3 Units

Terms offered: Summer 2018 Second 6 Week Session, Fall 2017, Summer 2017 Second 6 Week Session

We will focus on low- and middle-income countries because they experience the greatest burden of malnutrition, and because they face a unique context of limited financial and government resources. In this course, we will discuss the effects of nutrition throughout the lifecycle in pregnancy, infancy, childhood, and adulthood. We will focus on nutrition broadly including issues of undernutrition, micronutrient deficiencies, and obesity. We will also analyze and evaluate actions taken to ameliorate the major nutritional problems facing vulnerable populations in low- and middle-income countries.

Nutrition in Developing Countries: [Read More](#) [+]

### Hours & Format

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

**Summer:** 6 weeks - 8 hours of lecture per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Alternative to final exam.

**Instructor:** Fernald

Nutrition in Developing Countries: [Read Less](#) [-]

## PB HLTH 126 Health Economics and Public Policy 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

This course focuses on a selected set of the major health policy issues and uses economics to uncover and better understand the issues.

The course examines the scope for government intervention in health markets.

Health Economics and Public Policy: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** Public Health major or consent of instructor

### Hours & Format

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

**Summer:** 8 weeks - 6 hours of lecture and 2 hours of discussion per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Fulton

Health Economics and Public Policy: [Read Less](#) [-]

## PB HLTH 129 The Aging Human Brain 3 Units

Terms offered: Fall 2017

The course will survey the field of the human brain, with introductory lectures on the concepts of aging, and brief surveys of normal neuroanatomy, neurophysiology, neurochemistry, and neuropsychology as well as methods such as imaging, epidemiology, and pathology. The neurobiological changes associated with aging will be covered from the same perspectives: neuropsychology, anatomy, biochemistry, and physiology. Major neurological diseases of aging including Alzheimer's and Parkinson's disease will be covered, as will compensatory mechanisms, neuroendocrine changes with aging, depression and aging, epidemiology of aging, and risk factors for decline.

The Aging Human Brain: [Read More](#) [+]

### 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/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam not required.

**Instructor:** Jagust

The Aging Human Brain: [Read Less](#) [-]

## PB HLTH 130 Advanced Health Policy 3 Units

Terms offered: Spring 2018, Fall 2017, Spring 2017

This course will give you the opportunity to build upon your understanding of the organization, financing and current policy issues of the US health care delivery system obtained in PH 150D. In this course you will become engaged health policy analysts, applying policy making tools (e.g., policy memos/briefs, legislative analysis, regulatory comments, media advocacy, public testimony) to actual health issues and problems. Through individual and group work, you will draw upon both verbal and written communication skills to effectuate health policy change.

Advanced Health Policy: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** PH 150D

### Hours & Format

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

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Alternative to final exam.

**Instructor:** Flagg

Advanced Health Policy: [Read Less](#) [-]

## PB HLTH 141 Introduction to Biostatistics 5 Units

Terms offered: Summer 2017 Second 6 Week Session, Summer 2016 10 Week Session, Summer 2016 Second 6 Week Session

An intensive introductory course in statistical methods used in applied research. Emphasis on principles of statistical reasoning, underlying assumptions, and careful interpretation of results. Topics covered: descriptive statistics, graphical displays of data, introduction to probability, expectations and variance of random variables, confidence intervals and tests for means, differences of means, proportions, differences of proportions, chi-square tests for categorical variables, regression and multiple regression, an introduction to analysis of variance. Statistical software will be used to supplement hand calculation. Students who successfully complete Public Health 141 are prepared to continue their biostatistics course work in 200-level courses. With the approval of their degree program, MPH students may use Public Health 141 to fulfill the biostatistics course requirement (contact program manager for approval). Public Health 141 also fulfills the biostatistics course requirement for the Public Health Undergraduate Major.

Introduction to Biostatistics: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** High school algebra

### Hours & Format

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

**Summer:** 6 weeks - 12.5 hours of lecture and 7.5 hours of laboratory per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

Introduction to Biostatistics: [Read Less](#) [-]

## PB HLTH 142 Introduction to Probability and Statistics in Biology and Public Health 4 Units

Terms offered: Fall 2018, Summer 2018 Second 6 Week Session, Spring 2018

Descriptive statistics, probability, probability distributions, point and interval estimation, hypothesis testing, chi-square, correlation and regression with biomedical applications.

Introduction to Probability and Statistics in Biology and Public Health:

[Read More](#) [+]

### Rules & Requirements

**Prerequisites:** High school algebra

### Hours & Format

#### Fall and/or spring:

15 weeks - 3 hours of lecture, 1 hour of discussion, and 1 hour of laboratory per week

15 weeks - 3-3 hours of lecture, 1-2 hours of discussion, and 1-0 hours of laboratory per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Selvin

Introduction to Probability and Statistics in Biology and Public Health: [Read Less](#) [-]

## PB HLTH W142 Introduction to Probability and Statistics in Biology and Public Health 4 Units

Terms offered: Spring 2018, Spring 2016, Spring 2015

Descriptive statistics, probability, probability distributions, point and interval estimation, hypothesis testing, chi-square, correlation, and regression with biomedical applications.

Introduction to Probability and Statistics in Biology and Public Health:

[Read More](#) [+]

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam not required.

**Instructor:** Lahiff

Introduction to Probability and Statistics in Biology and Public Health: [Read Less](#) [-]



## PB HLTH 144A Introduction to SAS Programming 2 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014

This course is intended to serve as an introduction to the SAS programming language for Windows in an applied, workshop environment. Emphasis is on data management and programming in a public health research setting. Topics include SAS language to compute, recode, label, and format variables as well as sort, subset, concatenate, and merge data sets. SAS statistical procedures will be used to compute univariate and bivariate summary statistics and tests, simple linear models, graphical plots, and statistical output data sets.

Introduction to SAS Programming: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** 142 or consent of instructor

**Credit Restrictions:** This course (or equivalent) is required for students who plan to enroll in 251, Practicum in Epidemiological Methods. Enrollment is limited to School of Public Health students. If space permits, others may enroll with consent of instructor.

### Hours & Format

**Fall and/or spring:** 8 weeks - 2 hours of lecture and 3 hours of laboratory per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Lein

Introduction to SAS Programming: Read Less [\[-\]](#)

## PB HLTH 144B Intermediate SAS Programming 2 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014

Topics include data step flow control, looping and automated processing, implicit and explicit arrays, data simulation strategies, data set reconfiguration, use of SAS Macro variables, and writing simple SAS Macro programs.

Intermediate SAS Programming: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** 144A

**Credit Restrictions:** Enrollment is limited to School of Public Health students. If space permits, others may enroll with consent of instructor.

### Hours & Format

**Fall and/or spring:** 8 weeks - 2 hours of lecture and 3 hours of laboratory per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Lein

Intermediate SAS Programming: Read Less [\[-\]](#)

## PB HLTH 145 Statistical Analysis of Continuous Outcome Data 4 Units

Terms offered: Fall 2016, Fall 2015, Spring 2013

Regression models for continuous outcome data: least squares estimates and their properties, interpreting coefficients, prediction, comparing models, checking model assumptions, transformations, outliers, and influential points. Categorical explanatory variables: interaction and analysis of covariance, correlation and partial correlation. Appropriate graphical methods and statistical computing. Analysis of variance for one- and two-factor models: F tests, assumption checking, multiple comparisons. Random effects models and variance components. Introduction to repeated measures models.

Statistical Analysis of Continuous Outcome Data: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** 142 or equivalent

### 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/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Lahiff

**Formerly known as:** 142B

Statistical Analysis of Continuous Outcome Data: Read Less [\[-\]](#)

## PB HLTH 147 Global Perspective on Vision 2 Units

Terms offered: Spring 2018

There are four facets to the course. 1) Core knowledge of the epidemiology of the major causes of vision loss globally 2) The role of ophthalmology and surgical interventions in global health 3) novel teaching methods in group dynamics, public speaking, video making, physician shadowing, surgery observation and leadership opportunities 4) Hands on public health work with an intervention, such as vision screening for the homeless. A multidisciplinary approach will be employed to study what interventions are taking place to alleviate the burden of ophthalmic disease.

Global Perspective on Vision: Read More [\[+\]](#)

### Hours & Format

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

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Lee

**Formerly known as:** Public Health 247

Global Perspective on Vision: Read Less [\[-\]](#)

## PB HLTH 150A Introduction to Epidemiology and Human Disease 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

This course introduces epidemiological methods with the goal of teaching students to read critically and interpret published epidemiologic studies in humans. The course also exposes students to the epidemiology of diseases and conditions of current public health importance in the United States and internationally.

Introduction to Epidemiology and Human Disease: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** A course in statistics, preferably 142

### Hours & Format

**Fall and/or spring:** 15 weeks - 4 hours of lecture and 1 hour of discussion per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructors:** Abrams, Barcellos, Buffler

**Formerly known as:** 150

Introduction to Epidemiology and Human Disease: Read Less [\[-\]](#)

## PB HLTH 150B Introduction to Environmental Health Sciences 3 Units

Terms offered: Fall 2018, Summer 2018 First 6 Week Session, Fall 2017

The course will present 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. The basic principles of toxicology will be presented including dose-response relationships, absorption, distribution, metabolism, and excretion of chemicals. The overall role of environmental risks in the pattern of human disease, both nationally and internationally, will be covered. The engineering and policy strategies, including risk assessment, used to evaluate and control these risks will be introduced.

Introduction to Environmental Health Sciences: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** 142 and 150A recommended. May be taken concurrently

### 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/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** K. Smith

**Formerly known as:** second half of 150

Introduction to Environmental Health Sciences: Read Less [\[-\]](#)

## PB HLTH 150D Introduction to Health Policy and Management 3 Units

Terms offered: Fall 2018, Summer 2018 First 6 Week Session, Fall 2017

This course is intended to introduce students to health policy making and health care organizations in the United States. Students will be introduced to concepts from public policy, economics, organizational behavior, and political science. Students will also be introduced to current issues in U.S. health policy and the present organization of the U.S. health care system.

Introduction to Health Policy and Management: Read More [\[+\]](#)

### Hours & Format

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

### Summer:

6 weeks - 8 hours of lecture and 2 hours of discussion per week

8 weeks - 6 hours of lecture and 2 hours of discussion per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Flagg

Introduction to Health Policy and Management: Read Less [\[-\]](#)

## PB HLTH 150E Introduction to Community Health and Human Development 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

This course will consist of a survey of the major social, cultural, and bio-behavioral patterns of health and well-being among individuals, families, neighborhoods, and communities. The course also will address the design, implementation, and evaluation of leading social and behavioral interventions and social policies designed to improve community and population health. This course will satisfy one of the core requirements for the undergraduate major in public health.

Introduction to Community Health and Human Development: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Third or fourth undergraduate standing or consent of instructor

**Requirements this course satisfies:** Satisfies the American Cultures requirement

### 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/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Satariano

Introduction to Community Health and Human Development: Read Less [\[-\]](#)



## PB HLTH C155 Sociology of Health and Medicine 4 Units

Terms offered: Summer 2018 First 6 Week Session, Summer 2018 Second 6 Week Session, Spring 2018, Summer 2017 First 6 Week Session

This course covers several topics, including distributive justice in health care, the organization and politics of the health system, the correlates of health (by race, sex, class, income), pandemics (e.g., AIDS, Avian Flu and other influenzas, etc.), and the experience of illness and interactions with doctors and the medical system.

Sociology of Health and Medicine: Read More [a+]

### Rules & Requirements

**Prerequisites:** Sociology 1, 3, 3AC or consent of instructor

**Credit Restrictions:** Students will receive no credit for Sociology C115 after taking Sociology 155, Sociology C155/Public Health C155. <BR/>A deficient grade in Sociology 155 may be removed by taking Sociology C115/Public Health C155.

### Hours & Format

**Fall and/or spring:** 15 weeks - 3-3 hours of lecture and 0-2 hours of discussion per week

### Summer:

6 weeks - 7.5-7.5 hours of lecture and 0-2 hours of discussion per week

8 weeks - 6-6 hours of lecture and 0-2 hours of discussion per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Also listed as:** SOCIOL C115

Sociology of Health and Medicine: Read Less [-]

## PB HLTH C160 Environmental Health and Development 4 Units

Terms offered: Summer 2018 Second 6 Week Session, Spring 2018, Spring 2017

The health effects of environmental alterations caused by development programs and other human activities in both developing and developed areas. Case studies will contextualize methodological information and incorporate a global perspective on environmentally mediated diseases in diverse populations. Topics include water management; population change; toxics; energy development; air pollution; climate change; chemical use, etc.

Environmental Health and Development: Read More [a+]

### Hours & Format

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

**Summer:** 6 weeks - 6.5 hours of lecture and 2 hours of discussion per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Morello-Frosch

**Also listed as:** ESPM C167

Environmental Health and Development: Read Less [-]

## PB HLTH 162A Public Health Microbiology 3 Units

Terms offered: Fall 2018, Summer 2018 Second 6 Week Session, Fall 2017

Introduction to properties of microorganisms; their relationships with humans in causing infectious diseases and in maintaining health. With 162L, satisfies most requirements for a laboratory course in microbiology. May be taken without 162L.

Public Health Microbiology: Read More [a+]

### Rules & Requirements

**Prerequisites:** One year each of college-level biology and chemistry

### Hours & Format

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

**Summer:** 8 weeks - 6 hours of lecture per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructors:** Buehring, Dailey

Public Health Microbiology: Read Less [-]

## **PB HLTH 162L Public Health Microbiology Laboratory 1 Unit**

Terms offered: Fall 2018, Fall 2017, Fall 2016

Laboratory to accompany 162A.

Public Health Microbiology Laboratory: [Read More](#) [+]

### **Rules & Requirements**

**Prerequisites:** One year each of college-level biology and chemistry. Students must take 162A concurrently or have taken it previously

### **Hours & Format**

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

### **Summer:**

6 weeks - 6 hours of laboratory per week

8 weeks - 4 hours of laboratory per week

### **Additional Details**

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Alternative to final exam.

**Instructor:** Loretz

Public Health Microbiology Laboratory: [Read Less](#) [-]

## **PB HLTH 170C Drinking Water and Health 3 Units**

Terms offered: Spring 2018, Spring 2017, Spring 2016

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. A field trip to a local water treatment plant is included.

Drinking Water and Health: [Read More](#) [+]

### **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.

### **Hours & Format**

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

### **Additional Details**

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Alternative to final exam.

**Instructor:** Smith

Drinking Water and Health: [Read Less](#) [-]

## PB HLTH 181 Poverty and Population 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

Globally one million more births than deaths occur every 112 hours, 90% in the poorest countries. Between 1960 and 1980, considerable attention was focused on rapid population growth. Afterwards, the attention has faded and investment in family planning evaporated. Family size among some of the poorest women is increasing. This course seeks to provide an understanding of the relationships between population growth, poverty, women's autonomy, and health. It explores the political "fashions" underlying changing paradigms among demographers, and economists, and development specialists.

Poverty and Population: Read More [\[+\]](#)

### 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/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructors:** Campbell, Potts, Prata

Poverty and Population: Read Less [\[-\]](#)

## PB HLTH H195A Special Study for Honors Candidates in Public Health 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

Regular individual meetings with a faculty advisor culminating in a thesis at completion of H195B. H195A will concentrate primarily on researching a topic in public health. H195B will concentrate on development and writing up results in the form of a thesis. Students must enroll for both semesters of the sequence.

Special Study for Honors Candidates in Public Health: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Senior status; 3.3 overall GPA

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of independent study per week

### Summer:

6 weeks - 7.5 hours of independent study per week

8 weeks - 5.5 hours of independent study per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** 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. Final exam not required.

Special Study for Honors Candidates in Public Health: Read Less [\[-\]](#)

## PB HLTH H195B Special Study for Honors Candidates in Public Health 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

Regular individual meetings with a faculty advisor culminating in a thesis at completion of H195B. H195A will concentrate primarily on researching a topic in public health. H195B will concentrate on development and writing up results in the form of a thesis. Students must enroll for both semesters of the sequence.

Special Study for Honors Candidates in Public Health: Read More [\[+\]](#)

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of independent study per week

### Summer:

6 weeks - 7.5 hours of independent study per week

8 weeks - 5.5 hours of independent study per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** 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. Final exam not required.

Special Study for Honors Candidates in Public Health: Read Less [\[-\]](#)

## PB HLTH 196 Special Topics in Public Health 1 - 4 Units

Terms offered: Fall 2018, Summer 2018 Second 6 Week Session, Spring 2018

Special topics in various fields of Public Health. Topics covered will vary from semester to semester and will be announced at the beginning of each term.

Special Topics in Public Health: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Upper division standing

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

### Hours & Format

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

### Summer:

6 weeks - 1-10 hours of lecture per week

8 weeks - 1-8 hours of lecture per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

Special Topics in Public Health: Read Less [\[-\]](#)

## PB HLTH 197 Field Study in Public Health 1 - 4 Units

Terms offered: Spring 2018, Summer 2017 8 Week Session, Spring 2017  
Supervised experience relevant to specific aspects of public health in off-campus organizations. Regular individual meetings with faculty sponsor and written reports required.

Field Study in Public Health: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Upper division standing

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

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-4 hours of independent study per week

### Summer:

6 weeks - 1-10 hours of independent study per week

8 weeks - 1-8 hours of independent study per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

Field Study in Public Health: Read Less [\[-\]](#)

## PB HLTH 198 Directed Group Study 1 - 4 Units

Terms offered: Fall 2018, Spring 2018, Fall 2017

Directed Group Study: Read More [\[+\]](#)

### Rules & Requirements

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

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-4 hours of directed group study per week

### Summer:

6 weeks - 1-4 hours of directed group study per week

8 weeks - 1-4 hours of directed group study per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

Directed Group Study: Read Less [\[-\]](#)

## PB HLTH 199 Supervised Independent Study and Research 1 - 4 Units

Terms offered: Spring 2017, Spring 2016, Fall 2015

Enrollment restrictions apply; see the Introduction to Courses and Curricula section of this catalog.

Supervised Independent Study and Research: Read More [\[+\]](#)

### Rules & Requirements

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

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-4 hours of independent study per week

### Summer:

6 weeks - 1-4 hours of independent study per week

8 weeks - 1-4 hours of independent study per week

### Additional Details

**Subject/Course Level:** Public Health/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

Supervised Independent Study and Research: Read Less [\[-\]](#)

## 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. Current issues in Public Health Ethics: Research and Practice: Read More [\[+\]](#)

### 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

Current issues in Public Health Ethics: Research and Practice: Read Less [\[-\]](#)

## PB HLTH 200C Public Health Core Breadth Seminar 3 Units

Terms offered: Fall 2015, Fall 2009, Fall 2008

This course is designed to provide students with a brief introduction to the field of public health and a basic understanding of the contributions of the environmental, behavioral, and management and policy sciences to the practice of public health. Central foci of the course include the interactions of biology, behavior and environment; the community and population-based nature of public health; health disparities; the relationships among health care access, cost and quality of care; the performance of the health care delivery system; the concepts of risk and burden of disease; the importance of ecological and life course perspectives; and theory- and evidence-based public health research and practice. By the conclusion of this course, students will be able to discuss and describe seminal concepts and approaches, as well as current theories and methods underlying societal efforts to study and address key public health problems.

Public Health Core Breadth Seminar: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** Graduate standing

### 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:** Minkler, Shortell, Smith

Public Health Core Breadth Seminar: [Read Less](#) [-]

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

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Health Policy and Management Breadth Course: [Read More](#) [+]

### 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:** Robinson

**Formerly known as:** Public Health 200C1

Health Policy and Management Breadth Course: [Read Less](#) [-]

## PB HLTH 200K Environmental Health Sciences Breadth Course 2 Units

Terms offered: Spring 2018, Spring 2017

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.

Environmental Health Sciences Breadth Course: [Read More](#) [+]

### 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

Environmental Health Sciences Breadth Course: [Read Less](#) [-]

## PB HLTH 200L Health and Social Behavior Breadth 2 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

Health and social behavior uses theory and research from the behavioral sciences to explain the causes and health effects of salutary and risky behavior.

Health and Social Behavior Breadth: [Read More](#) [+]

### 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

Health and Social Behavior Breadth: [Read Less](#) [-]



## **PB HLTH W200E Health Policy and Management Breadth Course 3 Units**

Terms offered: Summer 2018 First 6 Week Session, Summer 2015 10 Week Session, Summer 2014 10 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.

Health Policy and Management Breadth Course: Read More [\[+\]](#)

### **Hours & Format**

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

**Summer:** 6 weeks - 6 hours of web-based lecture per week

**Online:** This is an online course.

### **Additional Details**

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Fulton

Health Policy and Management Breadth Course: Read Less [\[-\]](#)

## **PB HLTH W200F Environmental Health Sciences Breadth Course 2 Units**

Terms offered: Spring 2018, Spring 2016, Spring 2015

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.

Environmental Health Sciences Breadth Course: Read More [\[+\]](#)

### **Hours & Format**

**Fall and/or spring:** 7 weeks - 4 hours of web-based lecture per week

**Online:** This is an online course.

### **Additional Details**

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** K. Smith

Environmental Health Sciences Breadth Course: Read Less [\[-\]](#)

## **PB HLTH W200G Health and Social Behavior Breadth 3 Units**

Terms offered: Fall 2018, Summer 2016 10 Week Session, Summer 2015 10 Week Session

Health and social behavior uses theory and research from the behavioral sciences to explain the causes and health effects of salutary and risky behavior.

Health and Social Behavior Breadth: Read More [\[+\]](#)

### **Hours & Format**

**Fall and/or spring:** 7 weeks - 5 hours of web-based lecture per week

**Summer:** 6 weeks - 6-6 hours of web-based lecture per week

**Online:** This is an online course.

### **Additional Details**

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Chang

Health and Social Behavior Breadth: Read Less [\[-\]](#)

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

Terms offered: Spring 2017, Spring 2016, Spring 2015

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.

Public Health Interventions: Theory, Practice, and Research: Read More [\[+\]](#)

### **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

Public Health Interventions: Theory, Practice, and Research: Read Less [\[-\]](#)

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

Terms offered: Spring 2017, Spring 2010, Spring 2009

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.

Ethnic and Cultural Diversity in Health Status: Read More [+]

### 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-Frosch

Ethnic and Cultural Diversity in Health Status: Read Less [-]

## PB HLTH 202G Advanced Alcohol Research Seminar 1 Unit

Terms offered: Fall 2018, Spring 2018, Fall 2017

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.

Advanced Alcohol Research Seminar: Read More [+]

### 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

Advanced Alcohol Research Seminar: Read Less [-]

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

Terms offered: Spring 2018, Spring 2017, Spring 2016, Spring 2015, Spring 2013

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.

Ethnic and Cultural Diversity in Health Status: Read More [+]

### 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

Ethnic and Cultural Diversity in Health Status: Read Less [-]

## PB HLTH W202 Ethnic and Cultural Diversity in Health Status 3 Units

Terms offered: Fall 2017, Fall 2015, Fall 2014

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.

Ethnic and Cultural Diversity in Health Status: Read More [+]

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Morello-Frosch

Ethnic and Cultural Diversity in Health Status: Read Less [-]

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

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Theories of Health and Social Behavior: Read More [\[+\]](#)

### **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

Theories of Health and Social Behavior: Read Less [\[-\]](#)

## **PB HLTH 204A Mass Communications in Public Health 3 Units**

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Mass Communications in Public Health: Read More [\[+\]](#)

### **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.

Mass Communications in Public Health: Read Less [\[-\]](#)

## **PB HLTH 204F Culture, Public Health Practice, and Eliminating Health Disparities: From Ideas to Action in the 21st Century 3 Units**

Terms offered: Spring 2016, Spring 2015, Spring 2013

Public health literature and practice make frequent reference to the terms culture, cultural competence, race, racism, ethnicity, and health disparities. Understanding these terms, their complex meanings and current application in public health practice is the subject matter of this course. By the end of the course students will be able to describe the concepts of culture, race, racism, ethnicity, cultural competence, cultural humility, health disparities and their use in public health theory and practice; identify and describe the application of these concepts in local public health practice; and demonstrate an understanding of these concepts and their application in public health practice through the completion of a group project.

Culture, Public Health Practice, and Eliminating Health Disparities: From Ideas to Action in the 21st Century: Read More [\[+\]](#)

### **Rules & Requirements**

**Prerequisites:** Graduate students in Public Health or by 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:** Nazeeri-Simmons

Culture, Public Health Practice, and Eliminating Health Disparities: From Ideas to Action in the 21st Century: Read Less [\[-\]](#)

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

Terms offered: Spring 2018, Spring 2017, Spring 2015

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

Research Advances in Health Disparities: Multidisciplinary Perspectives: Read More [\[+\]](#)

### 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

Research Advances in Health Disparities: Multidisciplinary Perspectives: Read Less [\[-\]](#)

## PB HLTH W204 Mass Communication in Public Health 3 Units

Terms offered: Summer 2018 Second 6 Week Session, Summer 2016 10 Week Session, Summer 2015 10 Week Session

The purpose of this course is to provide students with an understanding of how the media can be used to promote healthy public policy. The primary focus of the course is on "media advocacy." Students will learn how to frame issues from a public health perspective. In learning more about how the media operate, they will be better equipped to work effectively with journalists.

Mass Communication in Public Health: Read More [\[+\]](#)

### Hours & Format

**Fall and/or spring:** 6 weeks - 6-6 hours of web-based lecture per week

**Summer:** 6 weeks - 6-6 hours of web-based lecture per week

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Catalani

Mass Communication in Public Health: Read Less [\[-\]](#)

## PB HLTH 205 Program Planning, Development, and Evaluation 4 Units

Terms offered: Spring 2018, Spring 2016, Spring 2015

Basic elements and considerations in planning health programs; case material will be drawn from health settings, with emphasis on multidisciplinary planning. Assessment of problems, setting goals and objectives, designing activities, implementation and evaluation.

Program Planning, Development, and Evaluation: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Public health students

### 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.

Program Planning, Development, and Evaluation: Read Less [\[-\]](#)

## PB HLTH W205 Program Planning, Development, and Evaluation 3 Units

Terms offered: Fall 2015, Fall 2014, Fall 2012

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.

Program Planning, Development, and Evaluation: Read More [\[+\]](#)

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Dublin

Program Planning, Development, and Evaluation: Read Less [\[-\]](#)

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

Terms offered: Fall 2018, Fall 2017, Fall 2015

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.

PH Nutrition Core Course: Critical Issues in Public Health Nutrition: Read More [\[+\]](#)

### **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

PH Nutrition Core Course: Critical Issues in Public Health Nutrition: Read Less [\[-\]](#)

## **PB HLTH 206A Nutrition Status, Physical Activity, and Chronic Conditions 3 Units**

Terms offered: Fall 2015, Fall 2014, Fall 2013

Concepts, methods, and limitations in the determination of nutritional status; application of methodologies for determining and interpreting data; technical, social, and political implications of nutritional assessments and related community needs.

Nutrition Status, Physical Activity, and Chronic Conditions: Read More [\[+\]](#)

### **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:** Laraia

Nutrition Status, Physical Activity, and Chronic Conditions: Read Less [\[-\]](#)

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

Terms offered: Spring 2018, Spring 2017, Spring 2015

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.

Food and Nutrition Policies and Programs: Read More [\[+\]](#)

### **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

Food and Nutrition Policies and Programs: Read Less [\[-\]](#)

## **PB HLTH 206C Nutritional Epidemiology 3 Units**

Terms offered: Fall 2018, Fall 2017, Spring 2017

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.

Nutritional Epidemiology: Read More [\[+\]](#)

### **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

Nutritional Epidemiology: Read Less [\[-\]](#)



## **PB HLTH 206D Food and Nutrition Programs and Policies in Developing Countries 3 Units**

Terms offered: Fall 2017, Spring 2016, Fall 2015

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.

Food and Nutrition Programs and Policies in Developing Countries: Read More [\[+\]](#)

### **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:** Fernald

Food and Nutrition Programs and Policies in Developing Countries: Read Less [\[-\]](#)

## **PB HLTH W206 Maternal and Child Health Nutrition 3 Units**

Terms offered: Summer 2018 Second 6 Week Session

Nutrition plays a vital role in human reproduction, child growth/development. Course provides an overview of the major nutritional issues for infants, children, adolescents, and reproductive age women in the United States. One module on malnutrition offers global content. Reviews programs, interventions aimed at improving MCH nutrition, builds student familiarity with evidence-based MCH nutrition practice guidelines.

Demonstrates a methodology for applying this knowledge to food choices at a personal, programmatic level. Students will be asked to engage in a "hands on" experience with the USA's Supplemental Nutrition Assistance Program (formerly The Food Stamp Program). Supplemental learning activities for this course are highly interactive

Maternal and Child Health Nutrition: Read More [\[+\]](#)

### **Rules & Requirements**

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

### **Hours & Format**

**Summer:** 6 weeks - 6 hours of web-based lecture per week

**Online:** This is an online course.

### **Additional Details**

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Leung

Maternal and Child Health Nutrition: Read Less [\[-\]](#)

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

Terms offered: Fall 2018, Fall 2017, Fall 2016

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, psychological, 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.

Public Health Aspects of Maternal and Child Nutrition: Read More [+]

### **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

Public Health Aspects of Maternal and Child Nutrition: Read Less [-]

## **PB HLTH W209 Comparative Health Systems 3 Units**

Terms offered: Spring 2018

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.

Comparative Health Systems: Read More [+]

### **Hours & Format**

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

**Online:** This is an online course.

### **Additional Details**

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Feachem

Comparative Health Systems: Read Less [-]

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

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Foundations of Maternal and Child Health Policy, Practice and Science: Read More [+]

### 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

Foundations of Maternal and Child Health Policy, Practice and Science: Read Less [-]

## PB HLTH 210B Adolescent Health 3 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

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.

Adolescent Health: Read More [+]

### 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

Adolescent Health: Read Less [-]

## PB HLTH 210C Needs Assessment in Maternal and Child Health 3 Units

Terms offered: Fall 2015, Fall 2014, Fall 2013

The purpose of this course is to provide a conceptual and practical understanding of health needs and the strategies that can be used for conducting needs assessments in maternal and child health. The course is aimed at students who anticipate working in situations that involve measuring health problems in communities, planning for health services, and advocating or making decisions about the distribution of community health resources.

Needs Assessment in Maternal and Child Health: Read More [+]

### Rules & Requirements

**Prerequisites:** Graduate student in Public Health

**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.

**Instructor:** Guendelman

**Formerly known as:** 210B

Needs Assessment in Maternal and Child Health: Read Less [-]

## PB HLTH 210D Reproductive and Perinatal Epidemiology 2 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

Research methods and issues in perinatal and reproductive epidemiology with emphasis on methods of study. Specific adverse reproductive outcomes, risk factors, and prevalence will be discussed. Will include critiques of published studies and techniques of proposal writing.

Reproductive and Perinatal Epidemiology: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** Graduate standing in epidemiology or consent of instructor

**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/Graduate

**Grading:** Letter grade.

**Instructor:** Eskenazi

Reproductive and Perinatal Epidemiology: [Read Less](#) [-]

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

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Practicum in MCH Data Analysis I: [Read More](#) [+]

### Rules & Requirements

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

### Hours & Format

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

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Offered for satisfactory/unsatisfactory grade only.

**Instructor:** Eskenazi

Practicum in MCH Data Analysis I: [Read Less](#) [-]

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Practicum In MCH Data Analysis II: [Read More](#) [+]

### 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:** Offered for satisfactory/unsatisfactory grade only.

**Instructor:** Harley

Practicum In MCH Data Analysis II: [Read Less](#) [-]

## PB HLTH 211 Health and Human Rights 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Health and Human Rights: [Read More](#) [+]

### 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

Health and Human Rights: [Read Less](#) [-]

## PB HLTH 212A International Maternal and Child Health 2 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

International Maternal and Child Health: Read More [\[+\]](#)

### 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

International Maternal and Child Health: Read Less [\[-\]](#)

## PB HLTH 212C Migration and Health: A U.S.-Mexico Binational Perspective 2 - 3 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014

Building upon expertise on migration from Mexico to the U.S., the goal of this course is to strengthen students' knowledge and understanding of public health issues of immigrants and the effects that migration has on the health/disease issues of communities in the countries of origin, transit, and destination. Students will explore successful public health intervention programs targeting these populations.

Migration and Health: A U.S.-Mexico Binational Perspective: Read More [\[+\]](#)

### 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:** Guendelman

Migration and Health: A U.S.-Mexico Binational Perspective: Read Less [\[-\]](#)

## PB HLTH 212E Private Sector Health Services in Developing Countries 2 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014

This course will serve students intending to conduct research, policy work, or program implementation in health services in developing countries. Topics covered will include definition and typology of private sector in various countries, theories of private sector regulation, motivation, and research. Methodological and practical issues in measuring provider importance, quality, and in influencing the activities of actors in private health delivery will be explored from viewpoints of both research and programmatic intervention.

Private Sector Health Services in Developing Countries: Read More [\[+\]](#)

### 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.

**Instructors:** Montagu, Prata

Private Sector Health Services in Developing Countries: Read Less [\[-\]](#)

## PB HLTH W212 Foundations of Global Health 3 Units

Terms offered: Spring 2018

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.

Foundations of Global Health: Read More [\[+\]](#)

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Reingold, Fong

Foundations of Global Health: Read Less [\[-\]](#)



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

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Family Planning, Population Change, and Health: [Read More](#) [+]

### 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

Family Planning, Population Change, and Health: [Read Less](#) [-]

## PB HLTH W213 Global Health Ethics 3 Units

Terms offered: Fall 2018

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 diverse international perspectives on the concepts of ethics and health.

Global Health Ethics: [Read More](#) [+]

### Hours & Format

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

**Summer:** 8 weeks - 6 hours of web-based lecture per week

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Haar, Dandu, DeBoer

Global Health Ethics: [Read Less](#) [-]

## PB HLTH 214 Eat.Think.Design 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

This course is a team-oriented, project-based course designed around the case-based and learning-by-doing models. The critical elements of the human-centered design process – discovering, ideating, and prototyping – are learned through didactic sessions and an 8-week project students work on in teams. Working with community partners on a public health issue related to food, the student teams apply human-centered design skills to the problem, and design and pilot (when possible) a solution with and for their community partner.

Eat.Think.Design: [Read More](#) [+]

### 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:** Sandhu, Madsen

Eat.Think.Design: [Read Less](#) [-]

## PB HLTH 216A Biological Embedding of Social Factors 2 Units

Terms offered: Fall 2017, Spring 2016, Fall 2015

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.

Biological Embedding of Social Factors: [Read More](#) [+]

### 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

Biological Embedding of Social Factors: [Read Less](#) [-]

## PB HLTH 217C Aging and Public Health 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

The purpose of this course is to provide an overview of research, practice, and policy in the area of aging and public health. Topics will include the epidemiology of aging; race, class, gender, and aging; nutrition and the elderly; and current health policy surrounding aging. Themes running throughout the course and linking a number of the topics covered will include the diversity of the elderly; the importance of co-morbidity and functional health status in this population group; the family and broader environmental contexts in which aging takes place; and the influence of public and private sector policies on health and health-related behavior in the elderly. Weekly lectures by the faculty will be complemented by presentations by prominent Bay Area researchers in the areas of geriatrics and gerontology. This is the core course for the School of Public Health specialty in aging and public health.

Aging and Public Health: Read More [\[+\]](#)

### 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:** Satariano

Aging and Public Health: Read Less [\[-\]](#)

## PB HLTH C217D Biological and Public Health Aspects of Alzheimer's Disease 3 Units

Terms offered: Spring 2017, Spring 2015, Spring 2014, Spring 2013

This course will survey the field of Alzheimer's disease (AD) from a biological and public health perspective by reading original research papers in the fields of medicine, neuroscience, and epidemiology. The course will begin with a historical survey of the concept of AD, followed by a description of clinical and neuropathological features. Subsequent classes will cover the genetics and molecular biology of the disease, as well as biomarkers, epidemiology, risk factors, treatment, development of new diagnostic approaches, and ethical issues. The course will also serve as a model for the analysis of complex diseases with multiple genetic and environmental causes, and late onset neurodegenerative diseases. The course will also serve as a model for the analysis of complex diseases with multiple genetic and environmental causes and late-onset neurodegenerative disease.

Biological and Public Health Aspects of Alzheimer's Disease: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Graduate standing 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.

**Instructor:** Jagust

**Also listed as:** NEUROSC C217D

Biological and Public Health Aspects of Alzheimer's Disease: Read Less [\[-\]](#)

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

Terms offered: Fall 2018, Fall 2017, Spring 2017

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

Evaluation of Health and Social Programs: Read More [\[+\]](#)

### 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.

Evaluation of Health and Social Programs: Read Less [\[-\]](#)

## PB HLTH W218 Evaluation of Health and Social Programs 3 Units

Terms offered: Spring 2018, Spring 2015

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 health and social programs.

Evaluation of Health and Social Programs: [Read More](#) [+]

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Paleo

Evaluation of Health and Social Programs: [Read Less](#) [-]

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

Terms offered: Spring 2018, Spring 2016, Fall 2015

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.

Community-Based Participatory Research in Public Health: [Read More](#) [+]

### 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

Community-Based Participatory Research in Public Health: [Read Less](#) [-]

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

Terms offered: Fall 2015, Fall 2013, Fall 2012

This course provides students with a thorough tool kit for designing survey questionnaires and for implementing telephone, face-to-face, and mail surveys. The three-hour weekly class sessions are designed to convey practical knowledge, with a case study approach used to complement each topical lecture. An SPSS laboratory is also given each semester. The course is an elective for Health and Social Behavior students, and many from the multidisciplinary program and other tracks in the school (including UCSF, e.g., nurses in their Ph.D. programs) have often enrolled as well. By the end of the semester, students will have designed, as their class project, a research project including a study design rationale, aims and hypotheses, data collection methods and measures, human subjects consent form, codebook and analysis plan. Social and Behavioral Health Research: Introduction to Survey Methods: [Read More](#) [+]

### 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:** Karriker-Jaffe

Social and Behavioral Health Research: Introduction to Survey Methods: [Read Less](#) [-]

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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 textual 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.

Introduction to Qualitative Methods in Public Health Research: [Read More](#) [+]

### 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

Introduction to Qualitative Methods in Public Health Research: [Read Less](#) [-]

## PB HLTH W219 Social and Behavioral Health Research: Introduction to Survey Methods 3 Units

Terms offered: Spring 2018, Spring 2015

This course provides students with a thorough tool kit for designing survey questionnaires and for implementing telephone, face-to-face, mail, and internet surveys. The two three-hour, weekly class sessions are designed to convey practical knowledge with a case study approach used to complement the topical lectures. An SPSS laboratory also is given each semester.

Social and Behavioral Health Research: Introduction to Survey Methods:

[Read More](#) [+]

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Karriker-Jaffe

Social and Behavioral Health Research: Introduction to Survey Methods:

[Read Less](#) [-]

## PB HLTH 220 Health Policy Decision-Making 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Health Policy Decision-Making: [Read More](#) [+]

### 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

Health Policy Decision-Making: [Read Less](#) [-]

## PB HLTH 220C Health Risk Assessment 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2015

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.

Health Risk Assessment: [Read More](#) [+]

### 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.

**Instructor:** Remais

Health Risk Assessment: [Read Less](#) [-]

## PB HLTH 220D Health Policy Advocacy 3 Units

Terms offered: Fall 2018, Spring 2018, Fall 2017

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.

Health Policy Advocacy: [Read More](#) [+]

### 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

Health Policy Advocacy: [Read Less](#) [-]

## **PB HLTH 220E Global Health Policy 2 or 3 Units**

Terms offered: Spring 2016, Spring 2011, Fall 2010

This course will provide an intensive introduction to current topics in international health policy. Students in the course will become familiar with the major actors, institutions, and regimes that shape international health policy. The course will also introduce students to theories of governance as they apply to international settings and evaluate the relative roles of state actors, NGOs, and international regimes in producing key health policy outcomes. The course will cover several current issues in international health and will require students to critically assess the state of policy with respect to these issues. Using Bardach's method for policy analysis, students will analyze current policies and propose policy alternatives with an assessment of the tradeoffs implied in choosing a given policy option over its competitors.

Global Health Policy: [Read More](#) [+]

### **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:** Keller

Global Health Policy: [Read Less](#) [-]

## **PB HLTH W220 Advanced Health Policy 3 Units**

Terms offered: Fall 2018

This class will give you the opportunity to build upon your understanding of the organization, financing and current policy issues of the US health care delivery system obtained in PHW200E. In this course you will become engaged health policy analysts, applying policymaking tools (e.g., policy memos/briefs, legislative analysis, regulatory comments, media advocacy, public testimony) to actual health issues and problems. Through individual and group work, you will draw upon both verbal and written communication skills to learn how to effectuate health policy change.

Advanced Health Policy: [Read More](#) [+]

### **Rules & Requirements**

**Prerequisites:** PB HLTH W200E

### **Hours & Format**

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

**Summer:** 8 weeks - 6 hours of web-based lecture per week

**Online:** This is an online course.

### **Additional Details**

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Flagg

Advanced Health Policy: [Read Less](#) [-]



## PB HLTH 221 Mental Health Policies, Programs, and Services 2 Units

Terms offered: Spring 2017, Spring 2015, Spring 2013

This course provides a foundation for understanding mental illness and mental health services and the evolution and current state of our thinking about them. It presents the most frequent varieties of mental illness and addresses their frequency of occurrence, and it addresses the social disability from mental illness and the societal response to mental illness. It also considers treatments, services, effectiveness, quality of care, and financing, as well as considering financing, legal issues, and special concerns and services for children and youth. In addition, the course provides a forum to critically examine the knowledge base on mental illness, epidemiology, policies, programs, and services as it presents major controversies and highlights the best available evidence.

Mental Health Policies, Programs, and Services: [Read More](#) [+]

### 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:** Snowden

Mental Health Policies, Programs, and Services: [Read Less](#) [-]

## PB HLTH 221B Understanding and Overcoming Health Care Disparities 2 Units

Terms offered: Spring 2018, Spring 2016, Fall 2013

In this class, we will construct a framework to formulate explanations for health care disparities and to construct responses that have the potential for a policy-oriented, and therefore widespread, response. Taking advantage of selected developments in social science theory and research that can provide insight into how health care disparities come about, we will draw from anthropological and psychological theories of cultural orientation, cultural framing of problems, and cultural identity; as well as drawing from psychological theories of stress and coping. We also will draw from sociological theories of individual and community poverty, and theories characterizing health care system design and service delivery.

Understanding and Overcoming Health Care Disparities: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** Graduate standing 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.

**Instructor:** Snowden

Understanding and Overcoming Health Care Disparities: [Read Less](#) [-]

## PB HLTH 222A Health Care Technology Policy 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

The course examines the public policy institutions and processes influencing innovation, regulation, and payment for biotechnology, pharmaceuticals, and medical devices. Topics include technology transfer and patent law, the Food and Drug Administration (FDA) review for safety and efficacy, insurance coverage policy at the Center for Medicare and Medicaid Services (CMS), coverage, payment, and benefit by private insurers for new technology, and cost-effectiveness analysis. Special topics vary from year to year. Examples and case studies are drawn from all three of the technology sectors.

Health Care Technology Policy: [Read More](#) [+]

### 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

Health Care Technology Policy: [Read Less](#) [-]

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

Terms offered: Spring 2017, Spring 2016, Spring 2015

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.

Strategic Management and the Health Sector: [Read More](#) [+]

### 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

Strategic Management and the Health Sector: [Read Less](#) [-]

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

Terms offered: Fall 2018, Fall 2017, Fall 2016

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, alumni, and healthcare leaders.

Foundations of Health Policy and Management: Read More [\[+\]](#)

### 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

Foundations of Health Policy and Management: Read Less [\[-\]](#)

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Capstone Seminar in Health Policy and Management: Read More [\[+\]](#)

### 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

Capstone Seminar in Health Policy and Management: Read Less [\[-\]](#)

## PB HLTH W223 Strategic Management and the Health Sector 3 Units

Terms offered: Spring 2018, Spring 2014

The overall purpose of this course is to assist the student in managing healthcare organizations from a strategic perspective. This is accomplished by systemically addressing systemwide, organization-wide, group- and individual-level issues in strategy formulation, content, implementation, and performance. The course will cover a wide variety of health care organizations including physician group practices, health systems, hospitals, HMOs, suppliers, pharmaceutical and biotech companies.

Strategic Management and the Health Sector: Read More [a+]

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Shortell

Strategic Management and the Health Sector: Read Less [-]

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Organizational Behavior and Management in Health Care: Read More [a+]

### 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

Organizational Behavior and Management in Health Care: Read Less [-]

## PB HLTH 224C Advanced Health Care Organizations and Environments 3 Units

Terms offered: Fall 2016, Fall 2015, Fall 2014

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. Theories to be examined include bureaucracy, contingency theory, culture and climate, resource dependence, institutional theory, and theories of change and innovation. The seminar will rely on extensive student participation.

Advanced Health Care Organizations and Environments: Read More [a+]

### Rules & Requirements

**Prerequisites:** 224A 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:** Bloom

Advanced Health Care Organizations and Environments: Read Less [-]

## PB HLTH 224E Health Care Quality 3 Units

Terms offered: Fall 2018, Fall 2017

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.

Health Care Quality: Read More [a+]

### 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

Health Care Quality: Read Less [-]

## PB HLTH W224 Organizational Behavior and Management in Health Care 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2013

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.

Organizational Behavior and Management in Health Care: Read More [+]

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Rodriguez

Organizational Behavior and Management in Health Care: Read Less [-]

## PB HLTH 226A Health Economics A 2 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

This course introduces students to the economics of health and health care. In addition to familiarizing 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.

Health Economics A: Read More [+]

### 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

Health Economics A: Read Less [-]

## PB HLTH 226B Health Economics B 2 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

An economic and policy analysis of the health care system. It examines integration of the health care delivery system and the impact of competition and regulation on providers and patients. Alternative models of health care system reform are presented and analyzed.

Health Economics B: Read More [+]

### Rules & Requirements

**Prerequisites:** A recent graduate course in microeconomics, a second-level undergraduate course in microeconomics, 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:** Robinson, Whaley

Health Economics B: Read Less [-]

## PB HLTH 226C Economics of Population Health 3 Units

Terms offered: Spring 2017, Spring 2015, Spring 2013

An introduction to the literature that suggests that the performance of a regional economy affects the health of the population it supports. Controversies in the theoretical and empirical literature are discussed. The implications of the work for public health practice are discussed.

Economics of Population Health: Read More [+]

### 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.

**Instructors:** Catalano, Dow

Economics of Population Health: Read Less [-]

## PB HLTH 226D Global Health Economics 3 Units

Terms offered: Fall 2017, Fall 2015, Fall 2014

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 system. Students will make a presentation on a country's health system and write a paper.

Global Health Economics: Read More [\[+\]](#)

### 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

Global Health Economics: Read Less [\[-\]](#)

## PB HLTH W226A Health Economics 3 Units

Terms offered: Fall 2018

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.

Health Economics: Read More [\[+\]](#)

### Rules & Requirements

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

### Hours & Format

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

**Summer:** 8 weeks - 6 hours of web-based lecture per week

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Fulton

Health Economics: Read Less [\[-\]](#)

## PB HLTH W226C Economics of Population Health 3 Units

Terms offered: Spring 2018

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.

Economics of Population Health: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Graduate Standing

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Dow

Economics of Population Health: Read Less [\[-\]](#)

## PB HLTH W226F Cost-Effectiveness Analysis 1 Unit

Terms offered: Spring 2018

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.

Cost-Effectiveness Analysis: Read More [\[+\]](#)

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Dow

Cost-Effectiveness Analysis: Read Less [\[-\]](#)

**PB HLTH 227A Health Care Finance 3 Units**

Terms offered: Spring 2017, Fall 2015, Spring 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.

Health Care Finance: [Read More](#) [+]

**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

Health Care Finance: [Read Less](#) [-]

**PB HLTH W227A Health Care Finance 3 Units**

Terms offered: Summer 2018 Second 6 Week Session

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.

Health Care Finance: [Read More](#) [+]

**Rules & Requirements**

**Credit Restrictions:** Students who have completed on campus PB HLTH 227A will not receive credit for W227A

**Hours & Format**

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

**Summer:** 7 weeks - 6 hours of web-based lecture per week

**Online:** This is an online course.

**Additional Details**

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** MacPherson

Health Care Finance: [Read Less](#) [-]

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Analytic Methods for Health Policy and Management: [Read More](#) [+]

**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

Analytic Methods for Health Policy and Management: [Read Less](#) [-]

**PB HLTH 231C Health Care Operations and Management Methods 3 Units**

Terms offered: Spring 2015

This course will introduce students to basic operations research/management (OR/OM) methods and discuss how they can be applied in health care delivery settings. The class uses a problem-based, participatory approach to learning. Data management and analysis are conducted using Excel and STATA. Topics include process reengineering and job redesign, productivity and performance management, linear programming and operational decision-making, staffing and job scheduling, patient flow analysis, queuing theory and applications, forecasting, and supply chain management.

Health Care Operations and Management Methods: [Read More](#) [+]

**Rules & Requirements**

**Prerequisites:** PB HLTH 142 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

Health Care Operations and Management Methods: [Read Less](#) [-]



## PB HLTH C233 Healthy Cities 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Healthy Cities: Read More [+]

### 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

Healthy Cities: Read Less [-]

## 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. Green Chemistry: An Interdisciplinary Approach to Sustainability: Read More [+]

### 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

Green Chemistry: An Interdisciplinary Approach to Sustainability: Read Less [-]

## PB HLTH 235 Impact Evaluation for Health Professionals 3 Units

Terms offered: Fall 2016, Fall 2015, Fall 2014

This course will review the methods for the design and analysis of impact evaluations relevant to health professionals, especially those working in low and middle-income countries. The class will emphasize the challenges involved in identifying the causal relationship between a program or project and its outcomes while providing students with some experience in drafting a proposal that might be submitted to a funding agency for support of an impact evaluation. For doctoral students the course may help concretely to identify potential dissertation projects; for masters students the course will provide skills useful in obtaining a future job in the field.

Impact Evaluation for Health Professionals: Read More [+]

### Rules & Requirements

**Prerequisites:** Public Health 142 or equivalent Probability and Statistics course

### 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:** Colford, Gertler

Impact Evaluation for Health Professionals: Read Less [-]

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

U.S. Food and Drug Administration, Drug Development, and Public Health: Read More [+]

### 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

U.S. Food and Drug Administration, Drug Development, and Public Health: Read Less [-]

## PB HLTH W236A 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.

Regulatory Science, Drug Development and Public Health: Read More [+] **Hours & Format**

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

**Summer:** 8 weeks - 6 hours of web-based lecture per week

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Miller

Regulatory Science, Drug Development and Public Health: Read Less [-]

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

Terms offered: 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,

Theories and Methods in Health Policy and Health Services Research: Read More [+]

### 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

Theories and Methods in Health Policy and Health Services Research: Read Less [-]

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

Terms offered: Prior to 2007

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.

Theories and Methods in Health Policy and Health Services Research B: Read More [+]

### 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

Theories and Methods in Health Policy and Health Services Research B: Read Less [-]

## PB HLTH 237C Health Policy Research Colloquium 1 Unit

Terms offered: Fall 2018

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.

Health Policy Research Colloquium: Read More [+]

### 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

Health Policy Research Colloquium: Read Less [-]

## PB HLTH 237D Health Policy PhD Dissertation Seminar 2 Units

Terms offered: Fall 2018

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.

Health Policy PhD Dissertation Seminar: Read More [\[+\]](#)

### 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

Health Policy PhD Dissertation Seminar: Read Less [\[-\]](#)

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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 assumed. Introduction to Modern Biostatistical Theory and Practice: Read More [\[+\]](#)

### 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

Introduction to Modern Biostatistical Theory and Practice: Read Less [\[-\]](#)

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

Terms offered: Fall 2018, Fall 2017, Fall 2015, Fall 2013

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.

Biostatistical Methods: Survival Analysis and Causality: Read More [+]

### **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

Biostatistical Methods: Survival Analysis and Causality: Read Less [-]

## **PB HLTH C240C Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine 4 Units**

Terms offered: Fall 2016, Fall 2015, Fall 2014, Fall 2012

This course provides an introduction to computational statistics, with emphasis on statistical methods and software for addressing high-dimensional inference problems in biology and medicine. Topics include numerical and graphical data summaries, loss-based estimation (regression, classification, density estimation), smoothing, EM algorithm, Markov chain Monte-Carlo, clustering, multiple testing, resampling, hidden Markov models, in silico experiments.

Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine: Read More [+]

### **Rules & Requirements**

**Prerequisites:** Statistics 200A or equivalent (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:** Dudoit

**Also listed as:** STAT C245C

Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine: Read Less [-]

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

Terms offered: Fall 2018, Fall 2017, Fall 2015

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 discuss statistical computing resources, with emphasis on the R language and environment ([www.r-project.org](http://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.

Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine II: Read More [ + ]

### 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

Biostatistical Methods: Computational Statistics with Applications in Biology and Medicine II: Read Less [ - ]

## PB HLTH C240E Statistical Genomics 4 Units

Terms offered: Spring 2013, Fall 2012, Fall 2010, Fall 2009

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. This is the first course of a two-semester sequence, which provides an introduction to statistical and computational methods for the analysis of meiosis, population genetics, and genetic mapping. The second course is Statistics C245F/Public Health C240F. The courses are primarily intended for graduate students and advanced undergraduate students from the mathematical sciences.

Statistical Genomics: Read More [ + ]

### Rules & Requirements

**Prerequisites:** Statistics 200A and 200B or equivalent (may be taken concurrently). A course in algorithms and knowledge of at least one computing language (e.g., R, matlab) is recommended

### 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 C245E

Statistical Genomics: Read Less [ - ]

## PB HLTH C240F Statistical Genomics 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016, Spring 2015

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.

Statistical Genomics: Read More [ + ]

### 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

Statistical Genomics: Read Less [ - ]

## PB HLTH 241 Statistical Analysis of Categorical Data 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

Biostatistical concepts and modeling relevant to the design and analysis of multifactor population-based cohort and case-control studies, including matching. Measures of association, causal inference, confounding interaction. Introduction to binary regression, including logistic regression. Statistical Analysis of Categorical Data: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** 142 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:** Jewell

Statistical Analysis of Categorical Data: [Read Less](#) [-]

## PB HLTH C242C Longitudinal Data Analysis 4 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

The course covers the statistical issues surrounding estimation of effects using data on subjects followed through time. The course emphasizes a regression model approach and discusses disease incidence modeling and both continuous outcome data/linear models and longitudinal extensions to nonlinear models (e.g., logistic and Poisson). The primary focus is from the analysis side, but mathematical intuition behind the procedures will also be discussed. The statistical/mathematical material includes some survival analysis, linear models, logistic and Poisson regression, and matrix algebra for statistics. The course will conclude with an introduction to recently developed causal regression techniques (e.g., marginal structural models). Time permitting, serially correlated data on ecological units will also be discussed. Longitudinal Data Analysis: [Read More](#) [+]

### 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 discussion per week

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Hubbard, Jewell

**Also listed as:** STAT C247C

Longitudinal Data Analysis: [Read Less](#) [-]

## PB HLTH 243C Information Systems in Public Health 2 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

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. Information Systems in Public Health: [Read More](#) [+]

### 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

Information Systems in Public Health: [Read Less](#) [-]

## PB HLTH 243D Special Topics in Biostatistics: Adaptive Designs 3 Units

Terms offered: Fall 2018, Fall 2015, Fall 2014

This course examines the theory and statistical methods for analyzing data generated by adaptive group sequential designs. It also considers the construction of targeted adaptive group sequential designs that adapt in a way that is optimal for the estimation of a particular target feature of the data generating experiment (i.e., causal effect of the treatment). Topics to be covered include: sequential testing, adaptive sample size, martingale estimating functions to construct estimators, targeted maximum likelihood estimation for adaptive designs, targeted Bayesian learning for adaptive designs, martingale theory for the analysis of estimators for adaptive designs. Special Topics in Biostatistics: Adaptive Designs: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** Prior biostatistics or statistics course 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:** van der Laan

Special Topics in Biostatistics: Adaptive Designs: [Read Less](#) [-]



## PB HLTH 244 Big Data: A Public Health Perspective 3 - 4 Units

Terms offered: Spring 2018

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).

Big Data: A Public Health Perspective: Read More [+]

### Hours & Format

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

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Li

Big Data: A Public Health Perspective: Read Less [-]

## PB HLTH 245 Introduction to Multivariate Statistics 4 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Introduction to Multivariate Statistics: Read More [+]

### 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

Introduction to Multivariate Statistics: Read Less [-]

## PB HLTH 250A Epidemiologic Methods I 3 Units

Terms offered: Fall 2018, Summer 2018 Second 6 Week Session, Fall 2017

Principles and methods of epidemiology: study design, selection, and definition of cases and controls; sampling, data collection, analysis, and inference. Discussion session provides an opportunity to apply methods to problem sets and to discuss issues presented in lectures.

Epidemiologic Methods I: Read More [+]

### Rules & Requirements

**Prerequisites:** 142 (may be taken concurrently)

### Hours & Format

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

**Summer:** 6 weeks - 12 hours of lecture and 2 hours of discussion per week

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Reingold, Smith

Epidemiologic Methods I: Read Less [-]

## PB HLTH 250B Epidemiologic Methods II 4 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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 (Kleinbaum, Rothman, Miettinen).

The course is intended to provide a firm foundation for students who will subsequently enroll in 250C.

Epidemiologic Methods II: Read More [+]

### 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)

Epidemiologic Methods II: Read Less [-]

## PB HLTH 250C Advanced Epidemiologic Methods 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

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, and sensitivity analysis. Hands-on application is emphasized. Class time will consist of lectures, class discussion, student presentations and a weekly practicum.

Advanced Epidemiologic Methods: Read More [+]

### Rules & Requirements

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

### Hours & Format

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

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Bradshaw

Advanced Epidemiologic Methods: Read Less [-]

## PB HLTH W250 Epidemiologic Methods I 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2015

This introductory graduate course presents the principles and methods of epidemiology, including descriptive and analytic approaches to assessing the distributions of health, disease, and injury in the population and factors that influence those distributions. Through the combination of lecture, readings, and discussion of problem sets, students without prior coursework in epidemiology will acquire the core competencies in epidemiology expected of all MPH graduates.

Epidemiologic Methods I: Read More [+]

### Rules & Requirements

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

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Tager

Epidemiologic Methods I: Read Less [-]

## **PB HLTH W250F Epidemiologic Methods II: Part 1 3 Units**

Terms offered: Fall 2018

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.

Epidemiologic Methods II: Part 1: [Read More](#) [+]

### **Rules & Requirements**

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

### **Hours & Format**

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

**Summer:** 8 weeks - 6 hours of web-based lecture per week

**Online:** This is an online course.

### **Additional Details**

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** COLFORD, BENJAMIN-CHUNG

Epidemiologic Methods II: Part 1: [Read Less](#) [-]

## **PB HLTH W250G Epidemiologic Methods II: Part 2 3 Units**

Terms offered: Fall 2018

This course is intended as an intermediate level course in the field of epidemiology. Topics include 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 and survival analysis. 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.

Epidemiologic Methods II: Part 2: [Read More](#) [+]

### **Rules & Requirements**

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

### **Hours & Format**

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

**Summer:** 8 weeks - 6 hours of web-based lecture per week

**Online:** This is an online course.

### **Additional Details**

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Colford, Benjamin-Chung

Epidemiologic Methods II: Part 2: [Read Less](#) [-]

## PB HLTH 251C Causal Inference and Meta-Analysis in Epidemiology 2 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

This course will review the theoretical aspects of causal inference, literature review, and meta-analysis, but its focus will be more on the practical aspects of these topics that are not commonly found in textbooks or presented in classes on epidemiologic theory. It is hoped that the student develops the day-to-day skills necessary to complete and present a well-documented, accurate, and thorough review of epidemiologic literature.

Causal Inference and Meta-Analysis in Epidemiology: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Students in the first semester of the second year of the epidemiology/biostatistics Master's of Public Health program. (Students from other programs welcome.)

### 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:** A. Smith, Steinmaus

Causal Inference and Meta-Analysis in Epidemiology: Read Less [\[-\]](#)

## PB HLTH 251D Applied Epidemiology Using R 2 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Applied Epidemiology Using R: Read More [\[+\]](#)

### 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

Applied Epidemiology Using R: Read Less [\[-\]](#)

## PB HLTH 252 Epidemiological Analysis 3 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014

This course consists of two distinct components: (1) advanced treatment of epidemiologic methods: matched data, spatial analysis, logistic and Poisson regression models; (2) survival analysis: Kaplan-Meier estimation, survival distributions, parametric and semi-parametric survival analysis models. Students are encouraged to concurrently enroll in 248L which carries the prerequisite of a working knowledge of the statistical computing language R.

Epidemiological Analysis: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** 245, 250A, 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:** Selvin

Epidemiological Analysis: Read Less [\[-\]](#)

## PB HLTH 252B Modeling the Dynamics of Infectious Disease Processes 2 - 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

This course will cover the basic tools required to both critically read modeling papers and to develop and use models as research tools. Emphasis will be placed on using models to understand infectious disease processes and to evaluate potential control strategies. The class meeting will consist of both lecture material covering conceptual issues and a computer lab to apply these concepts using standard infectious disease models.

Modeling the Dynamics of Infectious Disease Processes: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Calculus (e.g. Math 1A-1B), statistical programming packages (247, 249, or equivalent)

### 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.

**Instructor:** Porco

Modeling the Dynamics of Infectious Disease Processes: Read Less [\[-\]](#)

## PB HLTH 252C Intervention Trial Design 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

Students learn (through lectures and graded student presentations and projects) to design clinical and population-level field trials. Topics: formulation of a testable hypothesis; identification of appropriate populations; blinding (including indices for assessment); randomization (including traditional and adaptive randomization algorithms); sample-size estimation; recruitment strategies; data collection systems; quality control and human subjects responsibilities; adverse effects monitoring; improving participant adherence; use of surrogate outcomes.

Intervention Trial Design: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** 245 and 250A (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.

**Instructor:** Colford

Intervention Trial Design: [Read Less](#) [-]

## PB HLTH 252D Introduction to Causal Inference 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Introduction to Causal Inference: [Read More](#) [+]

### 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

Introduction to Causal Inference: [Read Less](#) [-]

## PB HLTH 252E Advanced Topics in Causal Inference 4 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Advanced Topics in Causal Inference: [Read More](#) [+]

### 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

Advanced Topics in Causal Inference: [Read Less](#) [-]

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Epidemiology and Control of Infectious Diseases: [Read More](#) [+]

### 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

Epidemiology and Control of Infectious Diseases: [Read Less](#) [-]

## PB HLTH 253D Behavior and Policy Science in HIV Treatment and Prevention 3 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014

This course will integrate various social science disciplines and apply these perspectives to problems of HIV treatment and prevention, particularly in the developing world. Throughout the academic term, students will apply knowledge of behavioral science, epidemiology, quantitative and qualitative methods in the analysis of developing and evaluating HIV-related treatment and prevention interventions, including policy interventions. Course requirements will include the preparation of a major paper recommending interventions, country level budgets and evaluation designs for a specific developing country. Specific requirements for this paper will be distributed during the third class session.

Behavior and Policy Science in HIV Treatment and Prevention: Read More [\[+\]](#)

### 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:** Ekstrand, Morin

Behavior and Policy Science in HIV Treatment and Prevention: Read Less [\[-\]](#)

## PB HLTH 253E Ethical Challenges in Public Health Interventions: Catastrophic and Routine 2 Units

Terms offered: Spring 2015, Spring 2014, Spring 2013

This course aims to enhance course participants' ability to articulate and examine ethical issues surrounding responses to public health/healthcare challenges whether routine or during catastrophe. Discussions will be based on presentations and assigned readings for the class, and with an expectation that students will incorporate their own diverse views and approaches to moral and logistical challenges.

Ethical Challenges in Public Health Interventions: Catastrophic and Routine: Read More [\[+\]](#)

### 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:** Kayman

Ethical Challenges in Public Health Interventions: Catastrophic and Routine: Read Less [\[-\]](#)

## PB HLTH 253G Sexual Health Promotion and Sexually Transmitted Disease Control 2 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

This seminar will explore current issues and controversies in public health approaches to sexual health promotion and STD control with a focus on pragmatic skills including program development and evaluation. Students will engage in independent research with interactive group discussions and student presentations.

Sexual Health Promotion and Sexually Transmitted Disease Control: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Graduate students, undergraduates with 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:** Offered for satisfactory/unsatisfactory grade only.

**Instructor:** Bernstein

Sexual Health Promotion and Sexually Transmitted Disease Control: Read Less [\[-\]](#)

## PB HLTH C253 Foundations of Public Health 2 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

The seminar will introduce core disciplines and concepts in public health, using a case-based, integrated approach. Examples of cases discussed include: respiratory disease and air pollution; tobacco control and prevention of smoking-related conditions; disease elimination or eradication via childhood immunization; environmental control and prevention of schistosomiasis; behavior change and prevention of HIV/AIDS; and novel economic approaches to improving healthcare delivery to impoverished groups.

Foundations of Public Health: Read More [\[+\]](#)

### 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:** Reingold, Smith

**Also listed as:** DEVP C232

Foundations of Public Health: Read Less [\[-\]](#)



## PB HLTH 254 Occupational and Environmental Epidemiology 3 Units

Terms offered: Spring 2018, Spring 2016, Spring 2015

Epidemiological methods for designing, conducting, and interpreting epidemiological studies of persons occupationally or environmentally exposed to chemical and physical agents.

Occupational and Environmental Epidemiology: Read More [a+]

### 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

Occupational and Environmental Epidemiology: Read Less [-]

## PB HLTH 255A Social Epidemiology 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

This is a breadth course intended to provide an overview of the field of social epidemiology 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.

Social Epidemiology: Read More [a+]

### 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

Social Epidemiology: Read Less [-]

## PB HLTH 255D Methods in Social Epidemiology 2 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Methods in Social Epidemiology: Read More [a+]

### 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

Methods in Social Epidemiology: Read Less [-]

## PB HLTH 255E Structural Inequalities and Reproductive Health 2 Units

Terms offered: Spring 2015, Spring 2012, Spring 2011

This course will address the role that structural inequalities assume in shaping reproductive health disparities. We will examine relevant epidemiological research, review and critique public health interventions, and discuss how research in this area can inform policy. The course will be organized around three modules, each linked to reproductive health: poverty, gender-based violence, and migration. Within each module, students will examine measurement, research design, and ethical challenges.

Structural Inequalities and Reproductive Health: Read More [a+]

### Rules & Requirements

**Prerequisites:** 250A or equivalent, background in reproductive health

### 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:** Dunbar, Krishnan, Minnis

Structural Inequalities and Reproductive Health: Read Less [-]

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

Terms offered: Spring 2018, Spring 2016, Spring 2015

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.

Human Genome, Environment and Public Health: [Read More](#) [+]

### **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

Human Genome, Environment and Public Health: [Read Less](#) [-]

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

Terms offered: Spring 2018

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.

Human Genome, Environment and Public Health: [Read More](#) [+]

### **Rules & Requirements**

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

**Credit Restrictions:** Students who complete PB HLTH 256 receive no credit for completing PH C256.

### **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:** Barcellos, Holland

**Also listed as:** CMPBIO C256

Human Genome, Environment and Public Health: [Read Less](#) [-]

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

Terms offered: Prior to 2007

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.

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.

Human Genome, Environment and Human Health: [Read More](#) [+]

### 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

Human Genome, Environment and Human Health: [Read Less](#) [-]

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

Terms offered: Prior to 2007

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.

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.

Human Genome, Environment and Human Health: [Read More](#) [+]

### 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

Human Genome, Environment and Human Health: [Read Less](#) [-]

## 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.

Genetic Analysis Method: Read More [\[+\]](#)

### 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

Genetic Analysis Method: Read Less [\[-\]](#)

## PB HLTH 257 Outbreak Investigation 2 Units

Terms offered: Fall 2018, Spring 2018, Fall 2017

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.

Outbreak Investigation: Read More [\[+\]](#)

### 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

Outbreak Investigation: Read Less [\[-\]](#)

## PB HLTH W257 Public Health Preparedness and Emergency Response 3 Units

Terms offered: Summer 2018 Second 6 Week Session, Spring 2014

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.

Public Health Preparedness and Emergency Response: Read More [\[+\]](#)

### Rules & Requirements

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

### Hours & Format

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

**Summer:** 7 weeks - 6 hours of web-based lecture per week

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Aragon

Public Health Preparedness and Emergency Response: Read Less [\[-\]](#)

## PB HLTH 258 Cancer Epidemiology 3 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

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.

Cancer Epidemiology: Read More [\[+\]](#)

### 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

Cancer Epidemiology: Read Less [\[-\]](#)

## PB HLTH W258 Global Health Disaster Preparedness and Response 3 Units

Terms offered: Prior to 2007

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.

Global Health Disaster Preparedness and Response: Read More [\[+\]](#)

### Rules & Requirements

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

### Hours & Format

**Summer:** 6 weeks - 7 hours of web-based lecture per week

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Gershon

Global Health Disaster Preparedness and Response: Read Less [\[-\]](#)

## PB HLTH 259B Practical Applications of Epidemiologic Methods in Developing Countries 3 Units

Terms offered: Spring 2018, Spring 2012, Spring 2011

Practical application of epidemiologic methods in the developing country settings, including surveillance, surveys, case-control studies, and intervention trials. The applications of these methods to the study of infectious and non-infectious disease problems common in developing countries will be presented.

Practical Applications of Epidemiologic Methods in Developing Countries: Read More [\[+\]](#)

### 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:** Reingold

Practical Applications of Epidemiologic Methods in Developing Countries: Read Less [\[-\]](#)

## PB HLTH 260A Principles of Infectious Diseases 4 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Principles of Infectious Diseases: Read More [\[+\]](#)

### 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

Principles of Infectious Diseases: Read Less [\[-\]](#)

## PB HLTH 260B Principles of Infectious Diseases 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Principles of Infectious Diseases: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Upper division course preparation in biology

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Riley, Swartzberg

Principles of Infectious Diseases: Read Less [\[-\]](#)

## **PB HLTH 260C Infectious Disease Laboratory 2 or 4 Units**

Terms offered: Spring 2017, Spring 2016, Spring 2015

Module 1: Practice in standard techniques for the isolation, identification, and characterization of infectious agents; laboratory safety. Module

2: Application of molecular methods to the identification and characterization of infectious agents, vectors, and hosts.

Infectious Disease Laboratory: [Read More](#) [+]

### **Rules & Requirements**

**Prerequisites:** 260A or consent of instructor

### **Hours & Format**

**Fall and/or spring:** 15 weeks - 6 hours of laboratory and 4 hours of lecture per week

### **Additional Details**

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Loretz, Sensabaugh

Infectious Disease Laboratory: [Read Less](#) [-]

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

Terms offered: Fall 2018, Fall 2016, Fall 2015

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.

Molecular Epidemiology of Infectious Diseases: [Read More](#) [+]

### **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

Molecular Epidemiology of Infectious Diseases: [Read Less](#) [-]

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

Terms offered: Spring 2017, Spring 2015, Spring 2013

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. Infectious Disease Research in Developing Countries: [Read More](#) [+]

### **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

Infectious Disease Research in Developing Countries: [Read Less](#) [-]



## PB HLTH W260 Infectious Diseases 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2015

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.

Infectious Diseases: [Read More](#) [+]

### 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

**Repeat rules:** Course may be repeated for credit with instructor consent. Course may be repeated for credit when topic changes.

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Riley, Swartzberg

Infectious Diseases: [Read Less](#) [-]

## PB HLTH 261 Advanced Medical Virology 3 - 4 Units

Terms offered: Spring 2015, Spring 2013, Spring 2011

Analysis of viral and host factors that play a role in viral diseases of medical importance. Four units of credit given to doctoral students who write a research proposal on a topic other than that proposed for their dissertation.

Advanced Medical Virology: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** Consent of instructor

### 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:** Liu

Advanced Medical Virology: [Read Less](#) [-]

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Molecular and Cellular Basis of Bacterial Pathogenesis: [Read More](#) [+]

### 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

Molecular and Cellular Basis of Bacterial Pathogenesis: [Read Less](#) [-]

## PB HLTH 263 Public Health Immunology 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Public Health Immunology: Read More [+]

### 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

Public Health Immunology: Read Less [-]

## PB HLTH 264 Current Issues in Infectious Diseases 2 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Current Issues in Infectious Diseases: Read More [+]

### 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:** Sensabaugh

**Formerly known as:** 264A-264B

Current Issues in Infectious Diseases: Read Less [-]

## PB HLTH 265 Molecular Parasitology 3 Units

Terms offered: Fall 2017, Fall 2015, Fall 2013

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.

Molecular Parasitology: Read More [+]

### 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

Molecular Parasitology: Read Less [-]

## **PB HLTH 266 Viruses and Human Cancer 2 - 3 Units**

Terms offered: Spring 2016, Spring 2014, Spring 2013

Topics include the basic biology of cancer; molecular biology of tumor viruses; mechanisms of viral carcinogenesis; characteristics of virally transformed cells; the challenge of proving the viral etiology of human cancers; the epidemiology, pathology, diagnosis, treatment, and prevention of virally caused human cancers. The course format will include lectures and reading/discussion of original research publications. To be taken for three units if a term paper is written and for two units without a term paper.

Viruses and Human Cancer: [Read More](#) [+]

### **Rules & Requirements**

**Prerequisites:** Course in basic virology or microbiology

### **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:** Buehring

Viruses and Human Cancer: [Read Less](#) [-]

## **PB HLTH 266A Foodborne diseases 2 Units**

Terms offered: Fall 2016, Fall 2015, Fall 2014

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 gastroenteritis viruses. We will also study non-pathogen agents such as heavy metal, pesticide, and toxic chemicals. Furthermore, 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.

Foodborne diseases: [Read More](#) [+]

### **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

Foodborne diseases: [Read Less](#) [-]

## PB HLTH 266B Zoonotic Diseases 2 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Zoonotic Diseases: [Read More](#) [+]

### 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

Zoonotic Diseases: [Read Less](#) [-]

## PB HLTH 266C Hospital Associated Infections 2 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

This course will look at and evaluate the principles underlying the control of infections in hospitals, the causes of these infections, current important topics in this field and future trends. Students will gain an appreciation of the national and local programs involved in HAI's, their major causes, antimicrobial control, and specific agents and procedures causing HAI's.

Hospital Associated Infections: [Read More](#) [+]

### 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:** Swartzberg

Hospital Associated Infections: [Read Less](#) [-]

## PB HLTH 267B Characterization of Airborne Contaminants 4 Units

Terms offered: Spring 2017, Spring 2015, Spring 2013

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.

Characterization of Airborne Contaminants: [Read More](#) [+]

### 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

Characterization of Airborne Contaminants: [Read Less](#) [-]

## PB HLTH 269D Ergonomics Seminar 2 Units

Terms offered: Fall 2018, Fall 2016, Fall 2015

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.

Ergonomics Seminar: Read More [+]

### 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

Ergonomics Seminar: Read Less [-]

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

Terms offered: Fall 2017, Fall 2016, Fall 2015

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.

Current Topics in Environmental Medicine: Read More [+]

### 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

Current Topics in Environmental Medicine: Read Less [-]

## PB HLTH W269A Introduction to Physical Ergonomics 3 Units

Terms offered: Fall 2017

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.

Introduction to Physical Ergonomics: Read More [+]

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Harris Adamson, Potvin, Janowitz

Introduction to Physical Ergonomics: Read Less [-]

## PB HLTH 270 Introduction to Environmental Health Sciences 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Introduction to Environmental Health Sciences: Read More [+]

### Rules & Requirements

**Prerequisites:** One epidemiology course; one biostatistics course (may be taken concurrently). One Epidemiology course; one Biostatistics course, can be concurrent. (recently)

### 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

Introduction to Environmental Health Sciences: Read Less [-]

## PB HLTH 270A Exposure Assessment and Control 3 Units

Terms offered: Fall 2018, Spring 2018, Spring 2017

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.

Exposure Assessment and Control: Read More [+]

### 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

Exposure Assessment and Control: Read Less [-]

## PB HLTH 270B Toxicology I 3 Units

Terms offered: Spring 2018, Fall 2016, Fall 2015

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.

Toxicology I: Read More [+]

### 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

Toxicology I: Read Less [-]

## PB HLTH 270C Practical Toxicology 2 Units

Terms offered: Spring 2017, Spring 2016, Spring 2015

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.

Practical Toxicology: Read More [+]

### 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

Practical Toxicology: Read Less [-]



## PB HLTH 271C Drinking Water and Health 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Drinking Water and Health: Read More [+]

### 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

Drinking Water and Health: Read Less [-]

## PB HLTH 271D Global Burden of Disease and Comparative Risk Assessment 3 Units

Terms offered: Spring 2016, Spring 2015, Spring 2013

The Global Burden of Disease (GBD) database utilized by provides estimates of illness, injury, and death by disease type, age, sex, and world region in a consistent and coherent manner. The course will explore the ways such a detailed database makes possible a wide range of new types of analysis of health priorities and the relationship of database will also be introduced. This seminar will also provide an opportunity for reading and discussion of the basic assumptions, data limitations, critiques, and methodological difficulties of the GBD. It is intended to be a true seminar relying heavy on class participation. The homework assignments will be greatly facilitated by use of computer spreadsheets.

Global Burden of Disease and Comparative Risk Assessment: Read More [+]

### Rules & Requirements

**Prerequisites:** Graduate standing or consent of instructor. Introductory epidemiology (250A or equivalent) is recommended

### 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:** K. Smith

Global Burden of Disease and Comparative Risk Assessment: Read Less [-]

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Science and Policy for Environment and Health: Read More [\[+\]](#)

### 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

Science and Policy for Environment and Health: Read Less [\[-\]](#)

## PB HLTH 271G Health Implications of Climate Change 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Health Implications of Climate Change: Read More [\[+\]](#)

### 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

Health Implications of Climate Change: Read Less [\[-\]](#)

## PB HLTH C271G Health Implications of Climate Change 3 Units

Terms offered: 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.

Health Implications of Climate Change: Read More [\[+\]](#)

### 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

Health Implications of Climate Change: Read Less [\[-\]](#)

## PB HLTH 272A Geographic Information Science for Public and Environmental Health 4 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014

Geographic information systems (GIS) have emerged as an important tool for performing health and environmental analyses. GIS is generally seen as a spatial analysis system for the organization, storage, retrieval, and analysis of data for which the location and other spatial attributes are considered important (e.g., incidence of a specific disease condition in relation to a pollution source). GIS also encompasses the organizational structure, personnel, software, and hardware needed to support spatial analysis. For many health and social scientists, GIS has evolved into a new lens for viewing their work. The course will provide students with an introduction to this exciting and expanding field of inquiry. On successful completion of the course you should possess the following skills and knowledge: 1) A basic understanding of the fundamental geographic and cartographic concepts that underlie GIS. 2) Working knowledge of ArcGIS, a powerful "desktop" GIS software package that runs in a Windows environment. 3) Introductory knowledge of past, present, and possible future applications of GIS for health and environmental studies. Geographic Information Science for Public and Environmental Health: [Read More](#) [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Introductory statistics course or equivalent

### 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:** Jerrett

Geographic Information Science for Public and Environmental Health: [Read Less](#) [\[-\]](#)

## PB HLTH 272B Case Studies in Environmental and Occupational Epidemiology 2 Units

Terms offered: Fall 2016, Fall 2015, Fall 2014

Using published studies as examples, we will focus on key epidemiologic methods as they arise in the study of environmental hazards in the community and workplace. Selected topics include the validity of exposure assessment for both community-based and workplace-based studies, specific forms of selection bias (e.g., healthy worker survivor effect), measurement error (e.g., exposure misclassification), time varying confounding, and analytical methods to model exposure-response (e.g., person-years, causal models, spatial analysis, and nonlinear models) in environmental and occupational epidemiology. Grades will be based on class participation, homework, and final project.

Case Studies in Environmental and Occupational Epidemiology: [Read More](#) [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Public Health 250C and 241

### 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:** Buffler, Eisen, Hammond

Case Studies in Environmental and Occupational Epidemiology: [Read Less](#) [\[-\]](#)

## PB HLTH W272A Introduction to Geographic Information Systems for Public Health 3 Units

Terms offered: Spring 2018

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 conducting spatial queries. The role of locational information in aiding in the prevention of disease will be covered and discussed.

Introduction to Geographic Information Systems for Public Health: [Read More](#) [\[+\]](#)

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Casey, Midekisa

Introduction to Geographic Information Systems for Public Health: [Read Less](#) [\[-\]](#)

## PB HLTH W272B Applied GIS for Public Health Practice 3 Units

Terms offered: Spring 2018

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.

Applied GIS for Public Health Practice: Read More [+]

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Smith, C, Casey, Midekisa, Sturrock

Applied GIS for Public Health Practice: Read Less [-]

## PB HLTH W272C Applied Spatial Data Science for Public Health 3 Units

Terms offered: Fall 2018

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.

Applied Spatial Data Science for Public Health: Read More [+]

### Hours & Format

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

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructors:** Casey, Midekisa, Sturrock

Applied Spatial Data Science for Public Health: Read Less [-]

## PB HLTH 273 Environmental Determinants of Infectious Disease 3 Units

Terms offered: Fall 2018, Fall 2017

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.

Environmental Determinants of Infectious Disease: Read More [+]

### 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

Environmental Determinants of Infectious Disease: Read Less [-]

## PB HLTH 275 Current Topics in Vaccinology 2 Units

Terms offered: Spring 2018, Spring 2016, Spring 2014

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.

Current Topics in Vaccinology: Read More [+]

### 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

Current Topics in Vaccinology: Read Less [-]

## PB HLTH 281 Public Health and Spirituality 2 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Public Health and Spirituality: Read More [+]

### 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

Public Health and Spirituality: Read Less [-]

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

Terms offered: Fall 2018, Fall 2017, Fall 2016

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.

Public Health Injury Prevention and Control: Read More [+]

### 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

Public Health Injury Prevention and Control: Read Less [-]

## PB HLTH C285 Traffic Safety and Injury Control 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

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 occurred. Implications of intelligent transportation system concepts for traffic safety will be discussed throughout the course.

Traffic Safety and Injury Control: Read More [+]

### 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

Traffic Safety and Injury Control: Read Less [-]

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Preventive Medicine Residency Seminar: Managed Care and Preventive Medicine: [Read More](#) [+]

### **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

Preventive Medicine Residency Seminar: Managed Care and Preventive Medicine: [Read Less](#) [-]

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

Terms offered: Spring 2018, Spring 2017, Spring 2016

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.

Preventive Medicine Residency Seminar: Public Administration: [Read More](#) [+]

### **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

Preventive Medicine Residency Seminar: Public Administration: [Read Less](#) [-]



## PB HLTH W289 Interdisciplinary Health Seminar 3 Units

Terms offered: Summer 2018 First 6 Week Session, Summer 2017 First 6 Week Session, Summer 2016 10 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 negotiation skills, and the ability to complete a Human Subjects Protocol (IRB) application.

Interdisciplinary Health Seminar: [Read More](#) [+]

### Hours & Format

**Fall and/or spring:** 7 weeks - 5 hours of web-based lecture, 4 hours of lecture, and 4 hours of web-based discussion per week

**Summer:** 6 weeks - 5 hours of web-based lecture, 4 hours of lecture, and 4 hours of web-based discussion per week

**Online:** This is an online course.

### Additional Details

**Subject/Course Level:** Public Health/Graduate

**Grading:** Letter grade.

**Instructor:** Hosang

Interdisciplinary Health Seminar: [Read Less](#) [-]

## PB HLTH 290 Health Issues Seminars 1 - 4 Units

Terms offered: Fall 2018, Spring 2018, Fall 2017

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.

Health Issues Seminars: [Read More](#) [+]

### 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.

Health Issues Seminars: [Read Less](#) [-]

## PB HLTH 291A Preparation for Public Health Practice 2 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

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.

Preparation for Public Health Practice: [Read More](#) [+]

### 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.

Preparation for Public Health Practice: [Read Less](#) [-]

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

Terms offered: Fall 2018, Summer 2018 Second 6 Week Session, Spring 2018

Current topics and special issues in the health field.

Seminars for M.P.H. Students: [Read More](#) [+]

### 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 - 2.5-10 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.

Seminars for M.P.H. Students: [Read Less](#) [-]

## **PB HLTH 293 Doctoral Seminar 1 - 4 Units**

Terms offered: Fall 2018, Spring 2018, Fall 2017

Discussion and analysis of dissertation research projects, as well as of conceptual and methodological problems in planning and conducting health research.

Doctoral Seminar: Read More [a]

### **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.

Doctoral Seminar: Read Less [-]

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

Terms offered: Fall 2017, Spring 2017, Fall 2016

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.

Field Study in Public Health: Read More [a]

### **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.

Field Study in Public Health: Read Less [-]

## **PB HLTH 298 Group Study 1 - 8 Units**

Terms offered: Fall 2016, Spring 2016, Fall 2015

Group Study: Read More [a]

### **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.

Group Study: Read Less [-]

## **PB HLTH 299 Independent Research 1 - 12 Units**

Terms offered: Summer 2016 10 Week Session, Spring 2016, Fall 2015

Independent study and research.

Independent Research: Read More [a]

### **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.

Independent Research: Read Less [-]

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

Terms offered: Fall 2018, Fall 2016, Fall 2015

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. School of Public Health Schoolwide Pedagogy Course: [Read More](#) [+]

### **Rules & Requirements**

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

### **Hours & Format**

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

### **Additional Details**

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

**Grading:** Offered for satisfactory/unsatisfactory grade only.

**Formerly known as:** Public Health 333

School of Public Health Schoolwide Pedagogy Course: [Read Less](#) [-]

## **PB HLTH 375B Instructional Techniques in Biostatistics 2 Units**

Terms offered: Fall 2018, Spring 2018, Fall 2017

Discussion and practice of techniques in teaching biostatistics as applied to public health topics.

Instructional Techniques in Biostatistics: [Read More](#) [+]

### **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.

**Instructor:** Lahiff

**Formerly known as:** Public Health 300

Instructional Techniques in Biostatistics: [Read Less](#) [-]