Public health seeks to understand, and also to protect and improve, health at the level of a community or population. Communities make decisions and allocate resources that, intentionally or not, fundamentally shape human life. For example, great reductions in sickness and early death have come from social interventions with relatively low financial cost, such as physically separating drinking water from sewage, or distributing aspirin, condoms, mosquito nets, vaccines or soap, or sharing new ideas about life’s possibilities. The way a society is organized affects the way that social and scientific knowledge is distributed within it; access to that knowledge shapes health at the individual level. At its heart, the study of public health focuses on questions about relationships between science and society, and between reality and possibility; what effective public health policy is and how we can measure its effectiveness; what the relationship is, and ought to be, between research and policy; how we reconcile important moral and economic claims, or balance other values that compete with maximizing health; what counts as disease, over time and among cultures; how we think about cause and responsibility; what constitutes a healthy environment; how our fundamental beliefs determine our approaches to health decisions; and how such decisions ought to be made.

Requirements
Application to the concentration must be completed in the Spring of sophomore year. Applications are due during pre-registration. Application materials can be obtained on the public health website public-health.williams.edu by early April or by e-mailing the chair of the program. Due to excess demand for the concentration, applicants are not guaranteed admittance to the program. Depending on availability, a few students may be admitted in the Spring of Junior year with a mid-April deadline.

All students wishing to pursue the Area of Concentration should take this course early in their careers, preferably sophomore year. Students may petition the advisory committee to substitute a course taken in a study-abroad program focused on global health, providing that the course is equivalent in scope. However, students who plan to take advantage of this option should have taken at least two other courses from among the electives by the end of their sophomore year, and should recognize that those who lack a foundation in the core issues of the field may find it more challenging to prepare their proposal for admission to the concentration.

Statistics
Statistical analysis is at the heart of the quantitative tools necessary to study the health of populations. One course in statistics from the list below is required of all concentrators.

Elective Courses
Concentrators must take at least three electives, with at least two different prefixes, from the list below. Elective courses are grouped by category, but these clusters are not meant to constrain students to a single “track” within the program. Instead, each student is free to determine, with the guidance of an advisory committee member(s), a set of electives that provides an intellectually coherent exploration of their particular areas of interest within the field of public health. In choosing electives, students should consider the balance of breadth versus depth that will allow them to gain theoretical and methodological sophistication in one or more areas. Students may not substitute an independent study for any of these electives. Winter Study courses may not be counted towards the electives.

Experiential Component
Because many public health challenges cannot be fully appreciated until one has hands-on experience with real communities and actual populations, each concentrator must have at least one relevant field-based educational experience with a research component. This requirement may be met through participation in an approved study abroad program (see below), one of the Winter study courses marked with an asterisk, a WS99 project, or a not-for-credit summer or academic-year internship. In every case, the advisory committee must approve the project in advance. Please note that experiential component should address both the “public” and “health” in public health. Projects that center on clinical or lab or that do not have a meaningful health component will generally not satisfy the PH experiential requirement.
PHLH 402 (S) Senior Seminar in Public Health

The capstone seminar provides concentrators with the opportunity to reflect upon and synthesize their experiential learning in the context of understanding gained from a cohesive set of elective courses, and through the lens of a variety of intellectual and disciplinary frameworks. A second goal is to give concentrators experience working in a multi-disciplinary team to address a real-world, and in many cases very daunting, public health problem. Students will read, discuss, and compose written reflections on primary source empirical papers addressing a range of issues and disciplines in the field of public health. For example, topics may include the social determinants of health, environmental health risks, and access to health care. Students will also be divided into three or four research teams to investigate a contemporary real-life issue in public health by designing a study; collecting and analyzing data; and disseminating findings by written report and formal oral presentation to the public health advisory committee faculty. The capstone course is required of all concentrators, but may be opened to other students with relevant experience at the discretion of the instructor and the advisory committee, if space permits.

Written Proposal

To be considered for admission to the Area of Concentration in Public Health, students must submit a written statement describing the portfolio of courses, study abroad, and experiential learning component(s) they intend to pursue. In this proposal, candidates for the concentration should describe their intellectual goals, and if relevant, how these relate to their professional goals. A fundamental purpose of the proposal requirement is to encourage the student to consider concretely how s/he will engage with socio-cultural, behavioral, policy, and/or biomedical aspects of population health. To this end, students should address whether a methodological or disciplinary emphasis ties their chosen courses together, and how the intended experiential component will relate to this set of questions. This proposal is due by the end of course registration period in the spring of the sophomore year, and should be prepared in consultation with a member of the advisory committee. Concentrators are required to revisit and update their proposal prior to registration in the spring of the junior year, and to provide documentation of their internship experience both prospectively and retrospectively. Please note electives will not be offered every year. Students should check the course catalog as they considering possible electives.

PHLH Bioethics + Interpretations of Health

CHIN 253 / COMP 254 / WGSS 255(S) SEM "Illness" in Modern and Contemporary Chinese Literature and Culture
  Taught by: Man He
  Catalog details
PHIL 211 TUT Ethics of Public Health
  Taught by: Julie Pedroni
  Catalog details
PHIL 212 / STS 212 / WGSS 212 LEC Ethics and Reproductive Technologies
  Taught by: Julie Pedroni
  Catalog details
PHIL 213(S) TUT Biomedical Ethics
  Taught by: TBA
  Catalog details
PHIL 228 / STS 228 / WGSS 228 LEC Feminist Bioethics
  Taught by: Julie Pedroni
  Catalog details
PHIL 337(F) TUT Justice in Health Care
  Taught by: Julie Pedroni
  Catalog details
REL 246 / ANTH 246 / ASIA 246 / WGSS 246 TUT India's Identities: Nation, Community, & Individual
  Taught by: Kim Gutschow
  Catalog details
STS 227 Death and Dying
  Taught by: Julie Pedroni
  Catalog details
STS 311 / AMST 352 / ASIA 352(S) SEM Global Health in the Transpacific
  Taught by: Shoan Yin Cheung
  Catalog details

PHLH Biomedical Determinants of Health

BIOL 133 LEC Biology of Exercise and Nutrition
  Taught by: Steven Swoap
  Catalog details
BIOL 134 / ENVI 134(F) LEC The Tropics: Biology and Social Issues
  Taught by: Joan Edwards
  Catalog details
BIOL 219 TUT Dangerous Exposures: Environment, Immunity, and Infectious Disease
  Taught by: Lois Banta
BIOL 313 LEC Immunology
Taught by: Damian Turner

BIOL 315(S) LEC Microbiology: Diversity, Cellular Physiology, and Interactions
Taught by: Lois Banta

BIOL 417(S) SEM Translational Immunology: From Bench to Bedside
Taught by: Damian Turner

CHEM 341 / ENVI 341 LEC Toxicology and Cancer
Taught by: David Richardson

PSYC 313 / NSCI 313(F) SEM Opioids and the Opioid Crisis: The Neuroscience Behind an Epidemic
Taught by: Shivon Robinson

PSYC 335 SEM Early Experience and the Developing Infant
Taught by: Amie Hane

STS 115 AIDS: The Disease and Search for a Cure
Taught by: Bob Rawle

PHLH Core Courses

PHLH 201(S) SEM Dimensions of Public Health
Taught by: Kiaran Honderich

PHLH 402(S) SEM Senior Seminar in Public Health
Taught by: Marion Min-Barron

PHLH Decision-Making by Institutions + Individuals

ECON 205(S) SEM Public Economics
Taught by: TBA

ECON 220(S) LEC The Economics of Health and Health Care
Taught by: Lara Shore-Sheppard

ECON 242 LEC Evaluating the Costs and Benefits of Public Policies
Taught by: Mikael Svensson

ECON 381 LEC Global Health Policy Challenges
Taught by: Susan Godlonton

ECON 465(F) SEM Pollution and Labor Markets
Taught by: Matthew Gibson

ECON 468(F) SEM Your Money or Your Life: Health Disparities in the United States
Taught by: Tara Watson

ECON 504(F) SEM Public Economics in Developing Countries
Taught by: Jon Bakiia

PSCI 209 / WGSS 209 SEM Poverty in America
Taught by: Cathy Johnson

PSCI 228(S) LEC International Organization
Taught by: Cheryl Shanks

PSYC 326 SEM Choice and Decision Making
Taught by: Kris Kirby
PHLH Methods in Public Health

ANTH 371 / STS 370 / WGSS 371(F) SEM Medicine and Campus Health in Disruptive Times
  Taught by: Kim Gutschow
Catalog details

ECON 523 / ECON 379(S) SEM Program Evaluation for International Development
  Taught by: Pamela Jakiela
Catalog details

MATH 310 / BIOL 210 LEC Mathematical Biology
  Taught by: Julie Blackwood
Catalog details

PHLH 250 SEM Qualitative Research Methods in Public Health
  Taught by: Marion Min-Barron
Catalog details

PHLH 255 SEM Research Methods in Public Health
  Taught by: Marion Min-Barron
Catalog details

PHLH Nutrition, Food Security, and Environmental Health

AFR 211 / AMST 211 / ENVI 211 / SOC 211(S) LEC Race, Environment, and the Body
  Taught by: TBA
Catalog details

BIOL 220 / ENVI 220(S) LEC Field Botany and Plant Natural History
  Taught by: Joan Edwards
Catalog details

BIOL 308(S) LEC Integrative Plant Biology: Fundamentals and New Frontiers
  Taught by: Claire Ting
Catalog details

ENVI 230(S) SEM Geographies of Food Justice
  Taught by: April Merleaux
Catalog details

ENVI 246 / AMST 245 / HIST 265(F) SEM Race, Power, & Food History
  Taught by: April Merleaux
Catalog details

ENVI 308 SEM Science and Politics in Environmental Decision Making
  Taught by: Pia Kohler
Catalog details

PHLH 220 SEM International Nutrition
  Taught by: Marion Min-Barron
Catalog details

PHLH Reproductive, Maternal and Child Health

PHLH 310(F) SEM Equity in Health
  Taught by: TBA
Catalog details

PSYC 335 SEM Early Experience and the Developing Infant
  Taught by: Amie Hane
Catalog details

PSYC 352 SEM Clinical and Community Psychology
  Taught by: Laurie Heatherington
Catalog details

PSYC 358 TUT Developmental Psychopathology: Trajectories of Risk and Resilience
  Taught by: Catherine Stroud
Catalog details

STS 102 / WGSS 103(F) TUT Breeding Controversy: Technologies and Ideologies of Population Control
  Taught by: Shoan Yin Cheung
Catalog details

PHLH Social Determinants of Health

AFR 211 / AMST 211 / ENVI 211 / SOC 211(S) LEC Race, Environment, and the Body
  Taught by: TBA
Catalog details

ECON 380 / ECON 519 LEC Population Economics
Taught by: Lucie Schmidt
Catalog details
ECON 468(F) SEM Your Money or Your Life: Health Disparities in the United States
Taught by: Tara Watson
Catalog details
PHLH 310(F) SEM Equity in Health
Taught by: TBA
Catalog details
PHLH 351(F) TUT Racism in Public Health
Taught by: Marion Min-Barron
Catalog details
PSCI 209 / WGSS 209 SEM Poverty in America
Taught by: Cathy Johnson
Catalog details
REL 269 / ANTH 269 / ASIA 269 / STS 269(F) TUT Mindfulness Examined: Meditation, Emotion, and Affective Neuroscience
Taught by: Kim Gutschow
Catalog details
STS 215 / GBST 217 SEM Viral Inequality: Power and Difference in Pandemics
Taught by: Shoan Yin Cheung
Catalog details
WGSS 230 / AFR 230 SEM Gender, Sexuality, and Global HIV/AIDS
Taught by: Kiaran Honderich
Catalog details

PHLH Statistics Courses

ECON 255(F, S) LEC Econometrics
Taught by: Matthew Gibson, David Zimmerman, Owen Ozier
Catalog details
POEC 253(F) LEC Empirical Methods in Political Economy
Taught by: Anand Swamy
Catalog details
PSYC 201(F, S) LEC Experimentation and Statistics
Taught by: Eliza L Congdon, Kris Kirby, Steven Fein, Shion Robinson, Kenneth Savitsky
Catalog details
STAT 101(F, S) LEC Elementary Statistics and Data Analysis
Taught by: Elizabeth Upton, Annie Tang, Shaoyang Ning
Catalog details
STAT 161(F, S) LEC Introductory Statistics for Social Science
Taught by: Annie Tang, Bernhard Klingenberg
Catalog details
STAT 201(F, S) LEC Statistics and Data Analysis
Taught by: Stewart Johnson
Catalog details
STAT 202(F, S) LEC Introduction to Statistical Modeling
Taught by: Daniel Turek, Shaoyang Ning
Catalog details
STAT 335 LEC Biostatistics and Epidemiology
Taught by: Anna Plantinga
Catalog details
STAT 372 LEC Longitudinal Data Analysis: Modeling Change over Time
Taught by: Anna Plantinga
Catalog details
STAT 410 LEC Statistical Genetics
Taught by: Anna Plantinga
Catalog details
STAT 440 LEC Categorical Data Analysis
Taught by: Bernhard Klingenberg
Catalog details

STUDY ABROAD AND INTERNSHIPS

Although not a requirement for the PH concentration, study abroad and/or overseas internships provide a crucial opportunity to engage with global health issues through field-based coursework and independent research projects. The Public Health program in coordination with the Study Abroad Advisor and the Office of Career Counseling will advise students on opportunities in these areas. In particular, students may want to consider one of the several Global Health options offered through SIT. One or more courses completed on an approved study abroad program can be counted toward
the three elective courses, with permission of the Chair. You can find general study away guidelines for Public Health at public-health.williams.edu.

**PHLH 201 (S) Dimensions of Public Health (DPE)**

Public health is concerned with protecting and improving health at the level of a community or population. Although individual behavior is an essential element of public health, collective, rather than individual, outcomes are the focus of public health study. In this course we will survey the field of public health, introducing students to core concepts and methods that highlight the interrelationship of individual choice and social institutions with environmental and biological factors in producing health outcomes at the population level. We will develop these concepts and methods within the context of signal cases and public health crises, covering infectious disease epidemics and prevention, sexual health, and mental health.

**Class Format:** Course will be taught remotely.

**Requirements/Evaluation:** two papers on a selected population or country and health issue, peer reviews and active contribution to class discussion, including on Glow

**Prerequisites:** none

**Enrollment Limit:** 14

**Enrollment Preferences:** sophomores, potential Public Health concentrators

**Expected Class Size:** 14

**Grading:** no pass/fail option, yes fifth course option

**Distributions:** No divisional credit (DPE)

**Difference, Power, and Equity Notes:** This course fulfills the DPE requirement because of its central focus on the ways that difference and power shape health outcomes in the U.S. and internationally. It uses an interdisciplinary approach to explore issues including the historical relations between communities of color, healthcare providers, and public health practitioners; contestation over the role of markets and government in public health; and differing explanations for the patterns of race, class, etc., in health outcomes.

**Attributes:** PHLH Core Courses

---

**PHLH 220 (F) International Nutrition (DPE) (WS)**

Global malnutrition continues to represent one of the most challenging issues of international development. Problems of both under- and overnutrition beginning as early as in utero can detrimentally influence the health, development and survival of resource-limited populations. This course introduces students to the most prevalent nutritional issues through a food policy perspective and exposes them to a wide variety of interventions, policies and current debates in the field of international nutrition. In addition to exploring the multi-level programmatic approaches for the prevention and treatment of the related nutritional problems, students will gain exposure and experience in program design and program proposal writing. Readings will involve both real-world programmatic documents/evaluations as well as peer-reviewed journal articles. Examples will be drawn from Africa, Asia and Latin America.

**Class Format:** This class will be remote. Each week students will typically be asked to (1) watch a series of short lectures- think 10-15’ clips, (2) read peer reviewed articles and post on discussion boards (3) attend synchronous meetings - both in small groups of and as a whole class during assigned class time. Instructor will also be available for one-on-one online meetings/check-ins.

**Requirements/Evaluation:** six 1-page essays, one final term paper (10-15 pages), one oral presentation, and active class participation

**Prerequisites:** PHLH 201 or permission of instructor

**Enrollment Limit:** 12

**Enrollment Preferences:** Public Health concentrators

**Expected Class Size:** 12

**Grading:** yes pass/fail option, yes fifth course option

**Distributions:** (D2) (DPE) (WS)
Writing Skills Notes: As a writing skills course, students will write six 1-page essays (each with an optional rewrite) which will help build the specific writing skills necessary for the final 10- to 15 page paper. Students will receive from the instructor timely comments on their writing skills, with suggestions for improvement.

Difference, Power, and Equity Notes: This course exposes the issues of difference, power and inequity by exploring the unequal distribution of resources and power at the global, national and intra-national level within the international nutrition context. We will also critically engage with issues of power, cultural difference and related ethics in the context of international development and nutrition programming.

Attributes: PHLH Nutrition, Food Security + Environmental Health

Not offered current academic year

PHLH 250 (F) Qualitative Research Methods in Public Health

Qualitative methods provide the opportunity to add in-depth meaning and context regarding research on individuals and the environments of study. This course introduces students to qualitative research theory in Public Health and gives them the opportunity to ‘practice’ three qualitative research methods; (1) in-depth interviewing, (2) focus groups and (3) participant observation. Students will have the opportunity to pilot each of these three qualitative research methods, analyze a subset of the data via qualitative analysis software, and design a qualitative research study (including the research instrument). We will cover best practices in reporting qualitative results (for the purposes of peer-reviewed publication) and learn about the advantages and disadvantages of qualitative research in various domestic and international settings related to public health (such as nutrition, HIV and physical activity).

Requirements/Evaluation: three 1-page reflection papers, transcription/field notes of one qualitative method (5-7 pages), one research proposal (10-15 pages), and an oral presentation

Prerequisites: PHLH 201 or equivalent

Enrollment Limit: 19

Enrollment Preferences: Public Health concentrators

Expected Class Size: 15

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2)

Attributes: PHLH Methods in Public Health

Not offered current academic year

PHLH 255 (S) Research Methods in Public Health

This course will introduce students to three common research methods utilized within Public Health: qualitative methods, survey methods and epidemiology. We will cover the basic research design process, integrating and comparing the qualitative methods of interviewing and focus groups, survey instrument design and pretesting as well as basic epidemiologic methods and concepts. Readings and discussions will engage with best practices in reporting these types of methods (for the purposes of peer-reviewed publication). Lastly, students will have the opportunity to design research instruments, pilot some of these methods, and analyze a subset of the data via analysis software. Students who have taken PHLH 250 should not enroll in PHLH 255.

Requirements/Evaluation: three 1-page reflection papers, development of two research instruments (3-5 pages), one critique of a journal article (5 pages), an oral presentation and active class participation

Prerequisites: PHLH 201 or equivalent AND at least one Statistics course

Enrollment Limit: 19

Enrollment Preferences: Public Health concentrators

Expected Class Size: 15

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2)

Attributes: PHLH Methods in Public Health

Not offered current academic year

PHLH 310 (F) Equity in Health
Equity in health has been defined as inequalities in health outcomes based on irrelevant social characteristics. The Sustainable Development Goals and Agenda 2030 highlight equity in health as a main focus and key to achieving social sustainability. This course will introduce students to the concept of equity in health, and discuss the theoretical underpinnings of the pathways to unequal health outcomes. The social determinants of health and how they translate to uneven outcomes will be explored and discussed. There will also be a special focus on gender and gender-based violence as a driver of ill health. How to reduce inequity in health will be discussed and debated. Readings will involve some of the classic texts on health equity as well as recent explorations of the area.

Requirements/Evaluation: weekly short reflection papers and one final paper (10-12 pages)
Prerequisites: PHLH 201 Dimensions of Public Health or Permission of Instructor
Enrollment Limit: 16
Enrollment Preferences: Public Health Concentrators
Expected Class Size: 16
Grading: yes pass/fail option, yes fifth course option
Distributions: (D2)
Attributes: PHLH Reproductive, Maternal and Child Health  PHLH Social Determinants of Health

Fall 2021
SEM Section: 01   TR 8:30 am - 9:45 am

PHLH 351  (F)  Racism in Public Health  (DPE)
In the face of a global pandemic and increased police brutality, states and counties across the nation are declaring racism a public health crisis. This push to identify systemic racism as a high priority in public health action and policy is an important symbolic and political move. It names the faults of histories, systems and institutions but also brings to the spotlight the individual and community responsibility to dismantle racism in the US. In this tutorial, we will examine racism in public health policy, practice and research through an investigation of several mediums of evidence and information, ranging from peer reviewed literature to news editorials, podcasts and documentaries. We will explore specific pathways by which racism functions in the disciplines of biostatistics, epidemiology, social & behavioral sciences, health policy & management and environmental health sciences while also examining the dynamics of power and history in research and community practice. We will also gain skills in speaking across differences and articulation of how our own perceptions and lived experiences of race and racism impact our study of public health. This tutorial will most likely elicit uncomfortable and hard conversations about race and requires an openness to self-reflection and the practice of articulation.

Requirements/Evaluation: bi-weekly tutorial papers, weekly journaling, oral commentaries and tutorial discussion
Prerequisites: PHLH 201
Enrollment Limit: 10
Enrollment Preferences: Public Health concentrators
Expected Class Size: 10
Grading: no pass/fail option, no fifth course option
Distributions: (D2)  (DPE)

Difference, Power, and Equity Notes: In this course students will examine and critically examine the inequities and race based social and health injustices, and the ways racism infiltrates public health action and policy, both historically and currently. They will also refine their self reflection skills in understanding how their own positions of privilege and power, or lack thereof, inform their understanding of public health.

Attributes: PHLH Social Determinants of Health

Fall 2021
TUT Section: T1   TBA   Marion Min-Barron

PHLH 397  (F)  Independent Study: Public Health
Public Health Independent Study
Grading: yes pass/fail option, yes fifth course option
Distributions: (D2)
PHLH 398  (S)  Independent Study: Public Health

Public Health Independent Study

Grading:  yes pass/fail option,  yes fifth course option

Distributions:  (D2)

Spring 2022

IND Section: 01    TBA     Amie A. Hane

PHLH 402  (S)  Senior Seminar in Public Health

The capstone seminar provides concentrators with the opportunity to reflect upon and synthesize their experiential learning in the context of understanding gained from a cohesive set of elective courses, and through the lens of a variety of intellectual and disciplinary frameworks. A second goal is to give concentrators experience working in a multi-disciplinary team to address a real-world, and in many cases very daunting, public health problem. Students will read, discuss, and compose written reflections on primary source empirical papers addressing a range of issues and disciplines in the field of public health. For example, topics may include the social determinants of health, environmental health risks, and access to health care. Students will also be divided into small research teams to interact with local organizations and investigate a contemporary real-life issue in public health. The capstone course is required of all concentrators, but may be opened to other students with relevant experience at the discretion of the instructor and the advisory committee, if space permits.

Requirements/Evaluation:  active seminar participation, written reflections, contribution to the team research project, and a 12- to 15-page final paper

Prerequisites:  completion of at least four courses counting towards the PHLH concentration

Enrollment Limit:  12

Enrollment Preferences:  senior Public Health concentrators; students who are not senior Public Health concentrators should contact the instructor

Expected Class Size:  10

Grading:  no pass/fail option,  no fifth course option

Distributions:  No divisional credit

Attributes:  EXPE Experiential Education Courses  PHLH Core Courses

Winter Study  ******************************************************************************************************

PHLH 99  (W)  Independent Study: Public Health

Open to upperclass students. Students interested in doing an independent project (99) during Winter Study must make prior arrangements with a faculty sponsor. The student and professor then complete the independent study proposal form available online. The deadline is typically in late September. Proposals are reviewed by the pertinent department and the Winter Study Committee. Students will be notified if their proposal is approved prior to the Winter Study registration period.

Class Format:  independent study

Grading:  pass/fail only

Not offered current academic year