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** "Disease" in Modern Chinese Literature and Culture
  Taught by: Man He
  [Catalog details](#)

**PHIL 212 / SCST 212 / WGSS 212** Ethics and Reproductive Technologies
  Taught by: Julie Pedroni
  [Catalog details](#)

**PHIL 213 T(S)** Biomedical Ethics
  Taught by: Julie Pedroni
  [Catalog details](#)

**PHIL 227** Death and Dying
  Taught by: Julie Pedroni
  [Catalog details](#)

**PHIL 228 / STS 228 / WGSS 228(F)** Feminist Bioethics
  Taught by: Julie Pedroni
  [Catalog details](#)

**PHIL 274 T** Messing with People: The Ethics of Human Experimentation
  Taught by: Julie Pedroni
  [Catalog details](#)

**PHIL 337 T** Justice in Health Care
  Taught by: Julie Pedroni
  [Catalog details](#)

**REL 246 T / ANTH 246 / ASST 246 / WGSS 246(F, S)** India's Identities: Reproducing the Nation, Community and Individual
  Taught by: Kim Gutschow
  [Catalog details](#)

**SOC 332** Life and Death in Modernity
  Taught by: Grant Shoffstall
  [Catalog details](#)

**SOC 371 / HSCI 371 / SCST 371** Medicine, Technology, and Modern Power
  Taught by: Grant Shoffstall
  [Catalog details](#)

PHLH Biomedical Determinants of Health

**BIOL 133** Biology of Exercise and Nutrition
  Taught by: Steven Swoap
  [Catalog details](#)

**BIOL 134 / ENVI 134(F)** The Tropics: Biology and Social Issues
  Taught by: Joan Edwards
  [Catalog details](#)

**BIOL 219 TD** Dangerous Exposures: Environment, Immunity, and Infectious Disease
  Taught by: Lois Banta
BIOL 313(S) Immunology
Taught by: Damian Turner

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

BIOL 417 Translational Immunology: From Bench to Bedside
Taught by: Damian Turner

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

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

PSYC 317 T / NSCI 317 Nature via Nurture: Topics in Developmental Psychobiology
Taught by: Betty Zimmerberg

PSYC 335(F) Early Experience and the Developing Infant
Taught by: Amie Hane

PHLH Core Courses

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

PHLH 402(S) Senior Seminar in Public Health
Taught by: Susan Godlonton

PHLH Decision-Making by Institutions + Individuals

ECON 205(F) Public Economics
Taught by: Sara LaLumia

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

ECON 381 Global Health Policy Challenges
Taught by: Susan Godlonton

ECON 465 Pollution and the Labor Market
Taught by: Matthew Gibson

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

PHLH Methods in Public Health

ANTH 371 / STS 370 / WGSS 371(F) Medicine, Pathology, and Power: An Ethnographic View
Taught by: Kim Gutschow
PHLH Nutrition, Food Security, and Environmental Health

**AFR 211 / AMST 211 / ENVI 211 / SOC 211** Race and the Environment  
Taught by: James Manigault-Bryant

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

**BIOL 308(F)** Integrative Plant Biology: Fundamentals and New Frontiers  
Taught by: Claire Ting

**ENVI 283 / PSCI 283** Dirty Politics: Regulating Hazardous Chemicals and Wastes  
Taught by: Pia Kohler

**ENVI 308** Science and Politics in Environmental Decision Making  
Taught by: Pia Kohler

**ENVI 422** Ecology of Sustainable Agriculture  
Taught by: TBA

**PHLH 220(F)** International Nutrition  
Taught by: Marion Min-Barron

PHLH Reproductive, Maternal and Child Health

**PSYC 317 T / NSCI 317** Nature via Nurture: Topics in Developmental Psychobiology  
Taught by: Betty Zimmerberg

**PSYC 435(F)** Early Experience and the Developing Infant  
Taught by: Amie Hane

**PSYC 452** Clinical and Community Psychology  
Taught by: Laurie Heatherington

**PSYC 458 T(S)** Developmental Psychopathology: Trajectories of Risk and Resilience  
Taught by: Catherine Stroud

PHLH Social Determinants of Health

**AFR 211 / AMST 211 / ENVI 211 / SOC 211** Race and the Environment  
Taught by: James Manigault-Bryant

**ANTH 269 T / ASST 269 / REL 269 / STS 269(F, S)** Mindsight: Mindfulness and Medicine  
Taught by: Kim Gutschow

**ECON 380 / ECON 519** Population Economics  
Taught by: Lucie Schmidt

**ECON 468** Your Money or Your Life: Health Disparities in the United States  
Taught by: Tara Watson
PHLH Statistics Courses

**ECON 255 (F, S) Econometrics**
- Taught by: Matthew Gibson, Kenneth Kuttner, Lara Shore-Sheppard, David Zimmerman

**POEC 253 (F) Empirical Methods in Political Economy**
- Taught by: Anand Swamy

**PSYC 201 (F, S) Experimentation and Statistics**
- Taught by: Jeremy Cone, Kris Kirby, Kenneth Savitsky

**STAT 101 (F, S) Elementary Statistics and Data Analysis**
- Taught by: Elizabeth Upton

**STAT 161 (F, S) Introductory Statistics for Social Science**
- Taught by: Stewart Johnson, Shaoyang Ning

**STAT 201 (F, S) Statistics and Data Analysis**
- Taught by: Anna Plantinga

**STAT 202 (F, S) Introduction to Statistical Modeling**
- Taught by: Xizhen Cai

**STAT 372 (F) Longitudinal Data Analysis: Modeling Change over Time**
- Taught by: Anna Plantinga

**STAT 410 (F) Statistical Genetics**
- Taught by: Anna Plantinga

**STAT 440 (S) Categorical Data Analysis**
- Taught by: Bernhard Klingenberg

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](http://public-health.williams.edu).

**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

Winter 2020
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: Seminar

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

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: sophomores, potential Public Health concentrators

Expected Class Size: 19

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

Spring 2020

SEM Section: 01  TF 1:10 pm - 2:25 pm  Kiaran Honderich
SEM Section: 02  TF 2:35 pm - 3:50 pm  Kiaran Honderich

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. This course was previously titled Nutrition in the Developing World.

Class Format: seminar

Requirements/Evaluation: six 1-page essays, one situation analysis paper (5-7 pages), one final term paper (10-15 pages), one oral presentation, and active class participation

Prerequisites: PHLH 201 or equivalent

Enrollment Limit: 19

Enrollment Preferences: Public Health concentrators

Expected Class Size: 19

Grading:  no pass/fail option, no 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) and a 5- to 7-page, country assessment paper 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 nutrition program design and implementation.

Attributes: PHLH Nutrition, Food Security + Environmental Health

Fall 2019

SEM Section: 01    M 7:00 pm - 9:40 pm    Marion Min-Barron

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).

Class Format: seminar

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.

Class Format: seminar

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 397 (F) Independent Study: Public Health

Class Format: Independent Study
Grading: yes pass/fail option, yes fifth course option
Distributions: (D2)

Fall 2019
IND Section: 01 TBA Amie A. Hane

PHLH 398 (S) Independent Study: Public Health

Class Format: Independent Study
Grading: yes pass/fail option, yes fifth course option
Distributions: (D2)

Spring 2020
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 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.

Class Format: seminar/lab
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: 14
Enrollment Preferences: senior Public Health concentrators; students who are not senior Public Health concentrators should contact the instructor
Expected Class Size: 14
Grading: no pass/fail option, no fifth course option
Distributions: No divisional credit
Attributes: EXPE Experiential Education Courses PHLH Core Courses

Spring 2020
SEM Section: 01 TR 8:30 am - 9:45 am Susan Godlonton
LAB Section: 02 T 1:00 pm - 4:00 pm Marion Min-Barron