Public Health Studies

Public Health combines a prevention orientation with a population perspective in pursuit of better health for all members of society. Public health professionals deal with critical large-scale issues such as access to health care; chronic disease control; mapping, predicting, and containing outbreaks of infectious disease; as well as researching factors that contribute to health outcomes such as gender, poverty, and education. Public Health has close ties with medicine through research, clinical practice, and formulating policy.

The Public Health Studies Program offers undergraduates a major that links them to the world of public health through core courses taken on the Homewood campus, as well as electives taken at the Johns Hopkins Bloomberg School of Public Health (JHSPH).

Core course work at Homewood includes Fundamentals of Epidemiology, Environment and Your Health, Fundamentals of Health Policy and Management, Biostatistics, Social and Behavioral Health, as well as a year of Biology and Calculus I. Students will select additional public health coursework from a range of options that include the natural sciences, health economics, medical anthropology, disparities in health and access to health care, the history of science and medicine, and demography. The major is flexible and easily adapted to further course work in the natural sciences and historically about two-thirds of Public Health Studies majors complete the premedical core curriculum.

Public Health Studies majors also complete the Public Health Applied Experience as part of their undergraduate degree requirements. This involves a supervised, hands-on experience working with public health professionals. The goal of the applied experience requirement is to ensure that students have practical public health exposure in a clinical, research, or community setting. Find more information at http://krieger.jhu.edu/publichealth/academics/AE-Main.

The Johns Hopkins Bloomberg School of Public Health is the oldest and largest school of public health in the United States. Although its primary function is as a graduate school, seniors majoring in public health studies take a semester’s worth of courses there in fulfilling their B.A. degree requirements. Many students get involved in ongoing research projects at JHSPH such as developing malaria vaccine, investigating hospital patient safety protocols or assessing the links between poverty and poor health.

Available course work at JHSPH includes the following areas: health education, environmental health sciences, epidemiology, health finance and management, health policy, human genetics, immunology and infectious diseases, international health, maternal and child health, mental health, nutrition, occupational medicine/health protection and practice, population studies, toxicology, and tropical medicine, among others.

An honors option is available to Public Health Studies seniors with a major GPA of 3.3. Public Health Honors students work in a research capacity under the supervision of a JHU faculty member and with the guidance of the Director of the Public Health Studies program. Students register for 280.495 Honors in Public Health Seminar in the fall and 280.499 in the spring. Interested students should discuss their plans with the Director of the Public Health Studies program in the spring of their junior year.

Many Public Health Studies students have pursued international public health internships and study abroad opportunities both during the academic year and over the summer. In addition to a wide array of general options available through the JHU Office of Study Abroad, the PHS program has established two public-health specific annual programs: Intersession (3 1/2 weeks) in Uganda and Summer (7 weeks) in South Africa. Each includes both academic and applied components and allows students to earn graded JHU credits which can be used toward the Public Health Studies major. The Uganda program compares health issues in urban and rural settings, while the South Africa program closely investigates the impact of the HIV epidemic on prevention measures and healthcare delivery in that country. For more information, go to krieger.jhu.edu/publichealth/academics/study-abroad/.

The Public Health Studies office is located in the 3505 North Charles Building second floor, adjacent to the Homewood campus. Public Health Studies advisors may be consulted about the various courses, careers, and graduate programs in public health on a walk-in basis or by appointment. Information can also be obtained by emailing phstudies@jhu.edu or at http://krieger.jhu.edu/publichealth.

Bachelor of Arts/Masters Program

The Bachelor of Arts/Master of Health Sciences (BA/MHS) and Bachelor of Arts/Master of Sciences in Public Health (BA/MSPH) programs are a coordinated academic collaboration between the Krieger School of Arts and Sciences and the Johns Hopkins Bloomberg School of Public Health. It enables talented and committed Public Health Studies Program majors to complete a BA and master’s degree from the School of Public Health in five to six years.

The Department of Environmental Health Sciences, Department of Epidemiology and Department of Mental Health will consider JHU undergraduates majoring in Public Health Studies for admission to the BA/MHS program. The Department of Environmental Health Sciences also offers a BA/MSPH in Occupational and Environmental Hygiene. The Department of Health Policy and Management offers a BA/MSPH in Health Policy.

Public Health Studies students apply for early admission during their junior year. Admitted students must complete the BA degree before formally enrolling in the graduate school, but up to 16 of the public health credits earned inter-divisionally toward the BA may also apply toward the MHS or MSPH degree. In addition, students in this program will receive co-advising from both schools to optimize their academic experience. Find more information at http://krieger.jhu.edu/publichealth/academics/.

Public Health Studies Program Advisory Board

The Public Health Studies Program Advisory Board reviews the progress and status of the Public Health Studies Program. Members provide advice and guidance on issues that are vital to a successful program, such as faculty appointments, curriculum reviews, utilization of university resources, and new funding opportunities.

One designated Public Health Studies Alumni serves a 2-year term on the committee.
Board Members
Krieger School of Arts and Sciences
Joel Schildbach; Vice Dean for Undergraduate Education; Professor (Biology)
Richard Cone; Professor (Biophysics); Advisory Board Chair
Steven David; Professor (Political Science)
Andy Cherlin; Professor (Sociology); Benjamin H. Griswold III Professor of Public Policy
Adam Sheingate; Associate Professor (Political Science)

Johns Hopkins Bloomberg School of Public Health
Stephen Gange; Senior Associate Dean for Academic Affairs; Professor (Epidemiology)
Marie Diener-West; Abbey-Merrell Professor of Biostatistics; Chair, Master of Public Health Program
John Groopman; Anna M. Baetjer Professor in Environmental Health Sciences
Ellen MacKenzie; Fred and Julie Soper Professor in Health Policy and Management
James Yager; Edyth H. Schoenrich Professor in Preventive Medicine; Professor; Deputy Chair (Environmental Health Sciences)
Scott Zeger; Professor (Biostatistics); Professor (Epidemiology)

Requirements for the B.A. Degree
Also see Requirements for a Bachelor’s Degree (http://e-catalog.jhu.edu/undergrad-students/academic-policies/requirements-for-a-bachelors-degree).

All major requirements must be taken for a letter grade. Course taken satisfactory/unsatisfactory do not apply towards the major with some exceptions for the applied experience requirement. Major requirements are as follows:

Courses at Homewood

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS.110.106</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>AS.110.108</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>AS.280.335</td>
<td>The Environment and Your Health</td>
<td>3</td>
</tr>
<tr>
<td>AS.280.340</td>
<td>Fundamentals of Health Policy &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>AS.280.345</td>
<td>Public Health Biostatistics</td>
<td>4</td>
</tr>
<tr>
<td>AS.280.350</td>
<td>Fundamentals of Epidemiology</td>
<td>4</td>
</tr>
</tbody>
</table>

Select two courses in biology and one corresponding lab: 9-10

- AS.020.151 General Biology I
- AS.020.152 General Biology II
- AS.020.305 Biochemistry
- AS.020.306 Cell Biology

Select two introductory social science courses: 6

- AS.070.132 Invitation to Anthropology
- AS.140.105 History of Medicine
- AS.140.106 History of Modern Medicine
- AS.150.219 Introduction to Bioethics
- AS.180.101 Elements of Macroeconomics
- AS.180.102 Elements of Microeconomics

- AS.200.132 Introduction to Developmental Psychology
- AS.200.133 Introduction to Social Psychology
- AS.230.101 Introduction Sociology
- AS.230.150 Issues in International Development
- AS.271.107 Introduction to Sustainability

Select one course to satisfy the core competency in the social and behavioral aspects of public health: 3

- AS.230.341 Sociology of Health and Illness
- AS.280.215 Understanding Behavior Change: Theory and Application
- AS.280.360 Clinical & Public Health Behavior Change
- AS.280.375 Cultural Factor Of Public Health

Three public health courses at the 200-400 level offered on the Homewood campus 9

Ten credits of courses at the Bloomberg School of Public Health * 10

Applied clinical or community-based experience ** 0-3

Total Credits 55-59

* Requirements at JHSPH
Fifteen (15) units of courses are taken at the Johns Hopkins Bloomberg School of Public Health in the student’s fourth year. This is equivalent to 10 Homewood credits. Within the 15, students must create an 8 unit focus in one particular area, topic, or department. Other courses may be taken in any department. These courses may not be independent research/special study, taken S/U or online.

** Applied Experience
Public health studies majors will complete one (1) approved applied clinical or community-based experience. A minimum of 80 hours of applied work is required along with a synthesizing assignment. Additional information about this requirement is available here (http://krieger.jhu.edu/publichealth/academics/AE-Main).

Honors in Public Health Studies
An honors option is available to Public Health Studies seniors with a major GPA of 3.3. Public Health Honors students work in a research capacity under the supervision of a JHU faculty member and with the guidance of the Director of the Public Health Studies program. Students register for AS.280.495 Honors in Public Health - Seminar in the fall and AS.280.499 Honors in Public Health in the spring. Interested students should discuss their plans with the Director of the Public Health Studies program in the spring of their junior year.

For current faculty and contact information go to http://krieger.jhu.edu/publichealth/directory/

Faculty
Program Director
Kelly Gebo
M.D., M.P.H.; Professor (Medicine, Epidemiology, Public Health Studies).

Associate Director
Mieka Smart
DrPH.; Lecturer (Public Health Studies); Academic Advisor.

Assistant Director
Lisa Folda
M.H.S.; Lecturer (Public Health Studies); Academic Advisor.

**Academic Advisor**
Joseph Balabis  
M.P.H; Academic Advisor (Public Health Studies).

**Faculty**
Stanley Becker  
Professor (Population, Family, and Reproductive Health).

Peter Beilenson  
Associate (Public Health Studies).

David Bishai  
Professor (Population, Family, and Reproductive Health).

Lee Bone  
Associate Professor (Health, Behavior, and Society).

Joseph Bressler  
Professor (Environmental Health Sciences)

Lawrence Cheskin  
Associate Professor (Health, Behavior, and Society).

Carolyn Furr-Holden  
Associate Professor (Mental Health).

Leah Jager  
Assistant Scientist (Biostatistics).

Thomas LaVeist  
Professor (Health Policy and Management).

Philip Leaf  
Professor (Mental Health).

Darcy Phelan-Emrick  
Assistant Scientist (Epidemiology).

Jennifer Schrack  
Assistant Professor (Epidemiology).

Donald Steinwachs  
Professor (Health Policy and Management).

Margaret Taub  
Assistant Scientist (Biostatistics).

Michael Trush  
Professor (Environmental Health Sciences).

Peter Winch  
Professor (International Health).

Scott Zeger  
Professor (Biostatistics and Epidemiology).

Barry Zirkin  
Professor (Biochemistry and Molecular Biology).

For current course information and registration go to https://isis.jhu.edu/classes/

**Courses**

**AS.280.100. Public Health in Film and Media.**  
This course uses film to explore and question the cultural landscape of public health in today’s society. Public health is a richly diverse field that reaches not only into many areas of daily life, but into our cultural imagination as well. The purpose of this class is to examine how public health matters such as epidemic disease, access to health care, health and the law, bioethics, neglected tropical diseases and other topics are portrayed in feature films and documentaries. Each week students will view and discuss a film or documentary that addresses a public health issue. Freshmen Only. S/U Grading Only.  
Instructor(s): M. Smart  
Area: Social and Behavioral Sciences.

**AS.280.101. Introduction to Public Health.**  
An overview of the major concepts and themes in Public Health utilizing the social and natural science disciplines in populations world-wide.  
Instructor(s): M. Alexander  
Area: Social and Behavioral Sciences.

**AS.280.103. Public Health, Policy and Politics: A Primer.**  
Combining basic tenets of public health with real-life examples of public health practice in Baltimore, the course will provide an introduction to the field of public health. Throughout the course a major effort will be made to expose students to the wide array of opportunities that are available to those pursuing a career in public health.  
Instructor(s): P. Beilenson  
Area: Social and Behavioral Sciences.

**AS.280.104. Scaling Up the Food Movement: Farm-to-Institution Policies and Practice.**  
This course will introduce students to the intricate mechanisms behind institutional food service. Students will be given a background of Hopkins’ commitment to source more local, ecologically sound, fair, and humane food, and how this fits into the broader context of the growing farm-to-institution movement. Tours and discussions with producers, dining managers, and food service workers will highlight different perspectives on these trends, and their roles in creating a healthier food system.  
Area: Social and Behavioral Sciences.

**AS.280.105. JUMP: Pathway to Success.**  
This course for sophomores provides important aspects of medicine including interviewing skills, historical and environmental factors affecting health, and team work in a health care system. Students will have an opportunity to practice simulated medicine at the Johns Hopkins School of Medicine’s Simulation Center and through the CPR training office. A key part of the course is also having a variety of physicians from different specialty areas share their journeys to medicine, why they love medicine, and be available for questions. There will be faculty speaker at the end of the class on almost every day.  
Lastly, to simulate patient interviewing, student teams will interview and video record current Hopkins medical students. Similar to a patient history, students will have to generate a medical student oral history about their pathway to medicine. Final oral histories are presented the last day of class.  
Instructor(s): D. Teraguchi  
Area: Social and Behavioral Sciences.
**AS.280.106. JUMP: Introduction to Medicine.**
This course introduces first-year students to the connections between undergraduate education and the pursuit of medicine and other health related careers. Each class will focus on a specific content area related to the pathway to medicine such as professionalism, teamwork, public health, biomedical research, and communication. Because the course is located at the Johns Hopkins Medical Institutions campus (East Baltimore), medical and graduate students will play a vital role in the course. In the last hour of class, medical students will share their research or activities, which are particularly meaningful to them and insights from their undergraduate experiences that prepared them for the rigors and intensity of medical school. By the end of the course, students will be exposed to variety of components of medicine and perspectives on the life at Hopkins Medicine. JUMP Freshmen Only.
Instructor(s): D. Teraguchi.

**AS.280.110. Evidence in Epidemiology and Popular Culture.** 3 Credits.
In the past year, we have witnessed a broad range of controversial issues: from Ebola to anti-vaxers; protests in Ferguson and New York; the legalization of marijuana and Obamacare. Often the theories of health that experts develop and promote don’t resonate with the public they are intended to serve. Often times, different people interpret the same piece of evidence in very different ways. This course will teach students how to think critically about theories of health and disease and to develop communication skills to talk about public health in everyday conversation.
Instructor(s): A. Buttress
Area: Humanities, Social and Behavioral Sciences.

**AS.280.115. Issues in Public Health Ethics.**
Freshmen Seminar: Should overweight individuals pay more for health insurance like many smokers do? When is it appropriate to quarantine people during an infectious disease outbreak? Do we owe citizens universal access to quality, affordable health care? We will explore these questions, among others, through the lens of public health ethics. Freshmen Only.
Instructor(s): J. Leider
Area: Social and Behavioral Sciences.

**AS.280.120. Lectures on Public Health and Wellbeing in Baltimore.**
An introduction to Urban Health with Baltimore as a case study: wellbeing, nutrition, education, diversity, violence and city-wide geographic variation. Lectures by JHU Faculty, local government/service providers and advocates.
Instructor(s): P. Leaf
Area: Social and Behavioral Sciences.

**AS.280.121. Chemical Karma: From Pollution to Disease.**
This course follows several pollutants from their industrial sources to their human health outcomes, and teaches how to rigorously/systematically search for and synthesize concepts in environmental health literature. Term paper. ES3Hi Fellowships.
Instructor(s): M. Gribble
Area: Natural Sciences.

**AS.280.205. B'More: Junk Food vs. Whole Foods.**
Please note, class will meet Saturday, Jan. 24 in the event of inclement weather. This course is for freshmen ONLY. This course looks closely at the environment of Baltimore City’s complex food systems and what it would take to improve these systems to assure widespread access to nutritious, adequate, and affordable food. Students will gain hands-on experience through visiting a supermarket, a corner store, and an emergency food distribution center. The in-class sessions are structured primarily as discussion seminars based around the readings and trips, supplemented with some lectures and guest lectures.
Prerequisites: Students may enroll in one B'More course only.
AS.371.189 AND AS.270.119 AND AS.270.118 AND AS.060.153 AND AS.060.126 AND AS.100.197 AND AS.300.100 AND AS.360.176 AND AS.220.116 AND AS.230.116 AND AS.220.190 AND AS.220.194
Area: Social and Behavioral Sciences.

**AS.280.207. I Have My Public Health Degree, So Now What????.**
The goal of the course is to introduce students to and enthuse them about the vast array of public health practice careers, as well as foster individual career growth and development. Case studies will be presented and discussed to highlight a range of public health professional roles and responsibilities, as well as the skills and competencies required for effective public health practice. THE COURSE WILL INCLUDE TWO ALL DAY FIELD TRIPS TO PUBLIC HEALTH AGENCIES, NON-PROFITS, PRIVATE SECTOR, AND COMMUNITY BASED ORGANIZATIONS IN D.C. AND BALTIMORE SCHEDULED FOR JAN 7 & 8. A mandatory trip meeting and resume workshop will be held in early December in the Career Center Library, Garland Hall, 3rd floor. Course/trip attendees made by faculty selection and applications will be due to the JHU Career Center on November 14 by noon.
Instructor(s): B. Resnick; M. Gourdine
Area: Social and Behavioral Sciences.

**AS.280.208. Sexually Transmitted Infections - An Exercise in Public Health.**
This course introduces students to an overview of sexually transmitted infections (STIs) with a focus on upstream intervention by applying the Public Health problem solving paradigm. To simulate the real world, students are divided into small groups to tackle a STI problem in the community and demonstrate the mastery of public health concepts by successfully collaborating on a final paper with a descriptive analysis of an STI, its magnitude and determinants, exploration of the different intervention strategies and a defense of the intervention of choice.
Instructor(s): K. Mok
Area: Natural Sciences, Social and Behavioral Sciences.

Intersession Abroad Program. The course examines Childhood, Health and Disease in Uganda.
Instructor(s): M. Smart
Area: Social and Behavioral Sciences.
AS.280.211. Health Care, Housing and Homelessness.
Homelessness is bad for one’s health, and demonstrates deep social ills and policy failures. This course introduces issues fundamental to the modern phenomena of homelessness in the United States - and the connection between disparate health and desperate inequality. Through presentations and discussions with community experts – including people who have experienced homelessness – we will examine the causes of homelessness, as well as strategies for addressing the immediate health needs of homeless individuals and changing the social structures responsible for creating it.
Area: Social and Behavioral Sciences.

Infectious disease outbreaks are relatively common occurrences and outbreak investigations are a fundamental aspect of public health. The purpose of this course is to introduce students to the science of outbreak investigations and to provide an opportunity to apply these principles and basic epidemiological concepts in discussing recent outbreaks. To simulate a real world experience, students will be placed in the role of investigators during classroom discussions.
Instructor(s): K. Griffith
Area: Natural Sciences, Social and Behavioral Sciences.

How do U.S. military activities affect global and domestic public health? The course will explore the perspective that specific policies governing U.S. military activities exert broad influences on the public’s health, both in peace and war, and that in better understanding these influences, students will be positioned to recognize their significance in various public health settings, including international health, drug and vaccine development, and in the provision of mental healthcare to U.S. veterans.
Instructor(s): R. Nevin
Area: Social and Behavioral Sciences.

This course focuses on the importance of immunizations for child health. Students learn about vaccine-preventable illnesses that affect children; disease-tracking in Baltimore; and, strategies for getting child illness rates under control. Local immunization initiatives will be discussed, including Baltimore City’s model immunization program which made history in 1996 when it increased child immunization coverage to 99 in just 3 months. Through lectures, discussions and field trips, we explore methods and strategies that have helped Maryland maintain one of the top immunization coverage rates in the nation.
Instructor(s): J. Lam
Area: Natural Sciences, Social and Behavioral Sciences.

This course will begin by exposing students to a variety of theories of behavior change - why and how we do it, and why we often don't. From there they will apply this knowledge to, part of a semester-long group project, develop a health communication campaign designed to encourage changing a behavior among their peers. They will practice the skills necessary to analyze a problem, develop a campaign strategy, create persuasive materials, and implement and monitor that campaign. Some elements of impact evaluation will also be covered in this course.
Sophomores Only. Recommended Course Background: AS.280.101
Instructor(s): L. Folda
Area: Social and Behavioral Sciences.

This course looks historically at the relationship of public health to animal agriculture. We will track the co-evolution of the two disciplines over 200 years, with a focus on North America. Progressing through the changes animal agriculture underwent in this time span, students will use readings, film and radio to understand how public health was involved in these changes, and how they led to the present entanglement over sustainability, animal welfare, overgrazing, and bacon.
Instructor(s): J. DeBruicker
Area: Natural Sciences, Social and Behavioral Sciences.

This course examines bullying and aggression among school-aged youth from a public health perspective. We will explore the prevalence of bullying, theories about its etiology, and recent prevention efforts.
Instructor(s): J. Duong
Area: Social and Behavioral Sciences.

Health in Complex Humanitarian Emergencies (CHE) introduces students to the fundamentals of humanitarian response. This course explores a range of topics including: gender and vulnerable populations, war and health, refugees and internally displaced persons (IDPs), infectious diseases, water, sanitation and hygiene (WASH), risk communications, and the emerging field of digital humanitarianism. This course also examines the unique challenges of global climate change, health systems reconstruction in Haiti, and the Ebola outbreak in West Africa. All topics are presented with respect to their relation to complex humanitarian emergencies, and students are provided the opportunity to learn new skills and apply them to the complex issues of humanitarian response.
Instructor(s): J. Freeman
Area: Social and Behavioral Sciences.

AS.280.219. Breaking in Baltimore: HIV and AIDS.
Breaking in Baltimore is a week-long immersion experience where students explore social justice issues by engaging greater Baltimore through direct service and educational sessions. The HIV/AIDS program explores Baltimore’s healthcare infrastructure and the challenges facing diagnosed and vulnerable Baltimoreans. Students will participate in classroom sessions as well as service learning projects in greater Baltimore with local agencies. Student participation begins at noon on Saturday the 17th, through noon on the 23rd, and participate full-time, including some evening programming. Must apply through Center For Social Concern x6-4777. Application due Early November. Fee: Approx. $125
Instructor(s): A. Neyenhouse
Area: Social and Behavioral Sciences.

AS.280.220. Baltimore and The Wire: A focus on major urban issues.
Playing off the themes raised in the HBO series "The Wire", this course will provide an introduction to major issues confronting Baltimore and other American urban centers through a series of lectures by policy makers in the region.
Instructor(s): P. Beilenson
Area: Social and Behavioral Sciences.
**AS.280.221. The Sciences Behind HIV: Is eradication imminent?**
Students will obtain a fundamental understanding of HIV biology, including a review of its origin, routes of infection, host defenses and viral evasion strategies, and HIV treatment. Special focus will be on the evaluation of HIV prevention strategies including vaccines and microbicides. Recommended Course Background: one year of general biology, AS.020.151, AP Biology, or equivalent. This is a Public Health Teaching Prize Course.
Area: Natural Sciences.

**AS.280.223. Health and the Internet.**
This course will examine how the internet and web based applications influence individual and societal health. Health information is one of the most searched for subjects online, yet despite the proliferation of health related sites, there is still a need for quality, accurate and useable information. Blogs and online communities can bring patients together and aid in treatment and recovery. However, many Web 2.0 applications such as social networking sites, wikis and mobile technology that have the potential to increase interactivity and collaboration have yet to reach their full potential in healthcare delivery and promotion. Indeed, as the internet and new technologies hold great promise, there are also pitfalls such as spread of inaccurate or potentially dangerous information. This course will provide an overview of how the internet has changed health care and how new technologies will continue to influence our health.
Instructor(s): M. Massey
Area: Humanities, Social and Behavioral Sciences.

**AS.280.224. Health, Homelessness & Social Justice.**
Homelessness is bad for one’s health, and its existence, persistence, and growth demonstrate deep policy failures and social ills. This course examines issues fundamental to the modern phenomena of homelessness in the U.S. – and the connection between disparate health and desperate inequality. There are ethical values and dimensions to the decisions we make about health policy – and public policy generally. Life, liberty, the pursuit of happiness, equality, justice, community, democracy, human rights, and human flourishing: there are many values that we might prioritize – both individually and collectively – as we develop and assess programs, policies, and systems. In this course, we will consider these and other values together with issues of health and homelessness. We will also examine tools of policy analysis and political action, and how those committed to changing the world can use those tools to engage that system critically.
Instructor(s): A. Schneider
Area: Social and Behavioral Sciences.

**AS.280.225. Population, Health and Development.**
This course will cover the major world population changes in the past century as well as the contemporary situation and projections for this century. Topics include rapid population growth, the historical and continuing decline of death and birth rates, contraceptive methods as well as family planning and child survival programs, population aging, urbanization, population and the environment and the demographic effects of HIV/AIDS.
Prerequisites: Students who have taken AS.230.225 may not take AS.280.225.
Instructor(s): S. Becker
Area: Social and Behavioral Sciences.

**AS.280.226. Mini-Term: Urban Environments and Public Health.**
Introduction to physical and social environmental systems issues affecting the health of several marginalized populations (eg. immigrants, impoverished and homeless). The course will primarily use Baltimore as the field for experiential learning, and will incorporate cross-cultural discussions, a variety of readings, and guest lecturers from Hopkins faculty and industry experts. Course will meet for two weeks: from July 7th through 18th.
Instructor(s): A. Rule
Area: Social and Behavioral Sciences.

**AS.280.227. Medical Geography.**
This week long seminar-style course will explore the question of “Why place matters?” through lectures, readings and in-class discussion of geographic processes that influence individual- and community-level health status. Case study examples will be drawn from both local and global contexts. Students will engage in how to apply the geographic perspective to current and emerging global health issues.
Instructor(s): K. Shelley
Area: Social and Behavioral Sciences.

**AS.280.230. Public Health, Sexual Orientation, and Gender Identity.**
In recent years, lesbian, gay, bisexual, transgender (LGBT) health issues have become important public health concerns. This course will focus on key issues in LGBT health, including the health consequences of homophobia and heterosexism, racial and ethnic minorities and LGBT health, globalization, healthcare systems and services. Specific health topics to be addressed include mental health, substance use, violence, sexually transmitted infections, and access to health care. During this course, students will develop a greater understanding of health disparities among LGBT populations.
Instructor(s): T. Poteat
Area: Humanities, Social and Behavioral Sciences.

**AS.280.302. GIS as a Public Health Tool.**
This course provides an introduction to Geographic Information Systems (GIS) and presents its utility in the various fields of public health such as Epidemiology, Environmental Health and International Health. Provides exposure to GIS as a tool for describing the magnitude of health problems and for supporting health decision making. Course topics include a historical overview of the intersection between geography and public health; current epidemiological use of GIS; and, GIS applications in identifying public health problems such as the current Ebola outbreak. This course is ideal for students who desire exposure to the vast utility of GIS as it applies to public health.
Instructor(s): J. Ferguson
Area: Quantitative and Mathematical Sciences, Social and Behavioral Sciences.

**AS.280.303. Responding to Disasters: From Earthquakes to Ebola.**
Responding to Disasters: from Earthquakes to Ebola introduces students to the fundamentals of humanitarian and disaster response. The course is divided into four topic areas: (1) fundamentals of humanitarian emergencies, (2) methods in humanitarian emergency settings, (3) refugee health, and (4) emerging issues in humanitarian response.
Instructor(s): J. Freeman
Area: Social and Behavioral Sciences.
Drawing primarily on public health, anthropology, and sociology literature, the course critically examines debates surrounding the production of chronic illness, and resulting contestations as practices, laws, and policy are transformed.
Instructor(s): M. Philbin
Area: Social and Behavioral Sciences.

What’s the relation between food and mood? This course will journey through topics as diverse as micronutrients, caffeine, and eating behaviors to seek nutrition’s connection to behavior and mental health.
Recommended Course Background: AS.280.345 and/or AS.280.350
Area: Natural Sciences, Social and Behavioral Sciences.

How do doctors decide what to prescribe? How do clinical studies, elected officials, drug companies, personal beliefs, and insurance companies influence those decisions? This will not be on your MCATs.
Recommended Course Background: course in Introductory Statistics or Biostatistics. Deans Teaching Fellowship Course.
Instructor(s): A. Turnbull
Area: Social and Behavioral Sciences.

This writing intensive course will encourage students to consider what counts as evidence among public health professionals as well as popular audiences. Using case studies from the field of epidemiology, now emblematic of the field, students will learn about historical changes in theories of population health and disease. Through a series of writing assignments, students will interrogate the formal structure of scientific arguments and gain practice in synthesizing and communicating complex ideas to a lay audience. Juniors/Seniors Only
Prerequisites: Prerequisite/Corequisite: AS.280.350
Instructor(s): A. Buttriss
Area: Humanities, Social and Behavioral Sciences.

AS.280.313. The Germ Theory in Literature.
The Germ Theory in Literature is a writing course for science and public health majors, and for writing majors interested in science and public health. We examine the use of germs in popular literature, from 1900 to the present (with works by Paul de Kruif, Sinclair Lewis, Milton Silverman, Berton Roueché, Richard Preston, Laurie Garrett and John Barry). Students examine what happens to science when it is popularized in mainstream literature, and learn to write essays and opinion pieces using crisp, clear and purposeful prose. This course includes a writing workshop.
Instructor(s): K. Masterson
Area: Humanities.

Nutrition is a fundamental component of human health and a challenging science, with individual and societal factors that span the country and the world. The primary objective of this course is to provide a fundamental understanding of human nutrition and its role in public health by addressing multiple components including the core micro- and macro- nutrients, and food choices and their implications for personal health. The secondary objective is to examine many of today’s nutrition controversies, both scientific and societal. Accordingly, this course will encourage students to think about nutrition and its critical contribution to public health on individual, societal, and global levels. A fundamental knowledge of biology and/or anatomy and physiology is recommended.
Instructor(s): B. Ha; J. Schrack; Z. Chowdhury
Area: Social and Behavioral Sciences.

This course explores an array of questions related to nutrition, food access, socioeconomic and demographic factors that affects individuals, communities, and public policy. Students will seek answers through field trips, guest lectures, and discussion seminars. Deans Teaching Fellowship Course.
Instructor(s): S. Lee
Area: Social and Behavioral Sciences.

The course provides an in-depth overview of current challenges related to water, sanitation, and hygiene (WASH) in the developing world with an emphasis on the links between WASH and epidemiology, climate change, population, gender, equity, and policy. Juniors and seniors Only.
Area: Natural Sciences, Social and Behavioral Sciences.

Seminar combines lectures from AS.280.120 with additional readings and discussion to more deeply address urban health issues. If you register for this course you do NOT register for AS.280.120. Course is open to Sophomores and Juniors only, or by instructor’s permission.
Instructor(s): P. Leaf
Area: Social and Behavioral Sciences.

AS.280.325. Public Health in South Africa.
This course provides an in-depth overview of Public Health in South Africa, including material on the political climate, health care services, and the impact of the HIV/AIDS epidemic. Course is taught in Cape Town, South Africa.
Instructor(s): L. Folda
Area: Social and Behavioral Sciences.

AS.280.326. Community-Based Learning in South Africa.
3 Credit course taught in Cape Town, South Africa. This course may be used to satisfy the Public Health Applied Experience requirement. Students will participate in a community-based service learning program with a local NGO in Cape Town.
Instructor(s): L. Folda
Area: Social and Behavioral Sciences.
AS.280.329. The Good, the Bad and the Ugly: Scientific Literature.
This course covers how to conduct a literature review, and interpret and evaluate scientific literature that focuses on public health. In addition, this course will provide students with fundamental skills of writing a scientific manuscript. Skills obtained in this course will prepare students for advanced-level senior year classes at Bloomberg and other graduate institutions.
Prerequisites: AS.280.350;AS.280.345
Instructor(s): R. Thorpe
Area: Social and Behavioral Sciences.

AS.280.335. The Environment and Your Health.
This course surveys the basic concepts underlying environmental health sciences (toxicology, exposure assessment, risk assessment), current public health issues (hazardous waste, water- and food-borne diseases), and emerging global health threats (global warming, built environment, ozone depletion, sustainability). Public Health Studies, Global Environmental Change and Stability, and Earth and Planetary Science majors have 1st priority for enrollment. Your enrollment may be withdrawn at the discretion of the instructor if you are not a GECS, PHS, or EPS major.
Prerequisites: (Students may not have taken AS.270.320)
Instructor(s): J. Bressler; M. Trush
Area: Natural Sciences.

Through lectures and small group discussions, students will develop a framework for analyzing health care policy problems and gain familiarity with current issues including managed care, Medicare and the uninsured.
Instructor(s): D. Steinwachs
Area: Social and Behavioral Sciences.

AS.280.345. Public Health Biostatistics.
Using problem-based learning focusing on public health topics, students learn to describe & summarize data, make inferences regarding population parameters, & test hypotheses. Recommended Course Background: Four years of high school math.
Prerequisites: Statistics Sequence restriction: students who have completed any of these courses may not register: EN.550.211 OR EN.550.230 OR AS.200.314 OR AS.200.315 OR EN.550.310 OR EN.550.311 OR EN.560.435 OR EN.550.420 OR EN.550.430
Instructor(s): L. Jager; M. Taub
Area: Quantitative and Mathematical Sciences.

AS.280.346. Advanced Biostatistics Laboratory.
As a complementary course to 280.345, Public Health Biostatistics, this course teaches R programming skills necessary for conducting independent data analyses, beyond those presented in the main course. No programming experience is necessary, but a willingness to learn independently and work with other students is indispensable.
Prerequisites: Corequisite: AS.280.345
Corequisites : AS.280.345
Instructor(s): L. Jager; M. Taub
Area: Quantitative and Mathematical Sciences.

AS.280.347. Health Data Analysis Practicum.
Students will learn to formulate precise scientific and policy questions, design exploratory and confirmatory statistical analyses to address the questions, conduct appropriate analyses using the statistical package R, and communicate their findings through graphical and tabular displays that are presented in writing and in person. The course will be run seminar style in which students conduct data analysis to present to one another in one meeting per week. Evaluation will be through class participation and a final project in which students will analyze their own data set to address a question of their choice.
Instructor(s): S. Zeger
Area: Quantitative and Mathematical Sciences.

A practical introduction to epidemiology focusing on the principles and methods of examining the distribution and determinants of disease morbidity and mortality in human populations. Juniors and seniors only.
Instructor(s): D. Phelan-Emrick; I. Saldanha
Area: Quantitative and Mathematical Sciences.

This course explores the theory and practice of changing the health behaviors of individuals, and the public health and medical impact of doing so. Theoretical concepts are integrated with practical clinical applications, especially in the areas of diet and fitness. Skill building in persuasive, health-related communication will be included in smaller group discussions.
Instructor(s): L. Cheskin
Area: Social and Behavioral Sciences.

This course covers the influence of culture on public health, health policy, management and practice. It also provides background on disparities in health in the US with a particular focus on race, place, and poverty. Guest speakers include healthcare providers, managers, and policy-makers.
Instructor(s): C. Furr-Holden; T. Laveist
Area: Social and Behavioral Sciences.

Global health addresses the staggering global disparities in health status, drawing on epidemiology, demography, anthropology, economics, international relations and other disciplines. We review patterns of mortality, morbidity and disability in low and middle income countries, starting with malnutrition, infectious diseases and reproductive health, and continuing to an emerging agenda including mental health, injury prevention, surgical care, chronic diseases, and health impacts of climate change. Gender, health systems and health workforce challenges, and career trajectories in global health are also discussed. Recommended course background: Minimum of one prior course in Public Health.
Instructor(s): P. Winch
Area: Social and Behavioral Sciences.
AS.280.399. Community Based Learning - Practicum Community Health Care.
This course is designed to expose students to urban health with focus on Baltimore City through lectures, class discussions, and experiential learning. Students will select a community-based organization (CBO) according to their expressed interests and schedule in order to complete 45 hours of service based learning. Grades are based on participation, completion of service learning project, presentation, and papers. Open to Senior and Junior Public Health Studies majors only. 
Others by permission of instructor.
Instructor(s): J. Balabás; L. Bone
Area: Social and Behavioral Sciences.

AS.280.401. Alcohol, Media & Health.
Students will critically examine the public health impact of alcohol marketing and assess the consequences of the resulting change in patterns of alcohol use. Gordis Teaching Fellowship course. Public Health Majors only or permission required.
Instructor(s): S. Cukier
Area: Social and Behavioral Sciences.

AS.280.402. HIV, Behavior and Society.
This class will examine the behaviors associated with the HIV epidemic. We will explore the importance of behavior and context that affect the transmission, prevention, and treatment of HIV. Gordis Teaching Fellowship course. Public Health Majors only or permission required.
Instructor(s): C. Sun
Area: Social and Behavioral Sciences.

This course provides an introduction to the public health implications of intimate partner violence and the spectrum of activities used to understand and combat it - from measurement to intervention. This course will cover a variety of topics, focusing on both research and programming, including: qualitative and quantitative research methods, individual- and community-level interventions, ethical challenges, and populations of interest. Gordis Teaching Fellowship course. Public Health Majors only or permission required.
Instructor(s): A. Robinson
Area: Social and Behavioral Sciences.

AS.280.404. Immunity and Infectious Diseases of Public Health Importance.
Provides an overview of innate and adaptive immunity as they relate to the control of infection and the development of treatment and vaccination strategies for pathogens of public health significance. Gordis Teaching Fellowship course.
Prerequisites: AS.020.151 AND AS.020.152 or AP Biology
Instructor(s): J. Craig
Area: Natural Sciences.

This course explores the links between public health and human rights, applies human rights frameworks to public health policies, and explains why the human rights have been called “The conscience of public health.” Gordis Teaching Fellowship course. Public Health Majors only or permission required.
Instructor(s): W. Davis
Area: Social and Behavioral Sciences.

How does U.S. military policy impact global and national public health? Do U.S. military missions promoted as humanitarian assistance, such as those in Africa and Afghanistan, compromise global development and independent humanitarian action programs? Did the CIA’s covert use of a vaccination program in Pakistan as cover for intelligence gathering threaten the success of global immunization campaigns? How have vaccines and drugs developed for U.S. military use benefited global public health? These topics and much more will be the focus in this seminar that explores consequences within conflict zones and the developing world, and among military personnel and veterans. Gordis Teaching Fellowship course. Juniors and Seniors Public Health Studies majors only.
Instructor(s): R. Nevin
Area: Social and Behavioral Sciences.

This course will introduce students to the public health component of preparedness and response to common emergencies, including the public health implications of such situations and the role of public health agencies and practitioners. The course will employ an all-hazard perspective, including emerging infections, natural disasters, and terrorism. Students will understand the public health community’s role in preparing for and responding to disasters through case studies, discussion, debate, and material related to the national public health preparedness infrastructure. Juniors and seniors Public Health Studies majors only. Gordis Teaching Fellowship course. Recommended Course Background: AS.280.335
Instructor(s): N. Errett
Area: Social and Behavioral Sciences.

Examines the causes, consequences, and prevention of violence committed by or against young people through a public health lens. Interrupts prevailing notions about crime and punishment and shifts the discourse to encompass an ecological and developmental understanding of the problem. Media representations and other case studies of youth violence, including mass shootings, child soldiers in armed conflict, interpersonal violence, bullying, suicide, and gang violence, provide the basis for in-class, interactive analysis applying current theories. Introduces effective prevention strategies, underscoring the important role of youth leadership and advocacy to prevent violence. Juniors and seniors Public Health Studies majors only. Gordis Teaching Fellowship course. Recommended Course Background: AS.280.350
Instructor(s): J. Bottiani
Area: Social and Behavioral Sciences.

AS.280.409. Health Systems Challenges from Chronic Diseases in Low and Middle Income Countries.
This course provides a multidimensional health systems approach to chronic diseases, presently the largest population health burden in low and middle income countries. Learning tools include patient interviews, in-class debates, and country case studies. Recommended course background: AS.280.350: Fundamentals of Epidemiology. Gordis Teaching Fellowship course open to junior and seniors only.
Instructor(s): M. Socal
Area: Social and Behavioral Sciences.
Through a series of historical case studies we will explore the changing ideas and assumptions that have shaped our struggles to understand and improve health in the United States. Juniors and Seniors Public Health Studies majors only. Gordis Teaching Fellowship course.
Recommended Course Background: AS.280.350
Instructor(s): P. Rebeiro
Area: Humanities, Social and Behavioral Sciences.

This course will critically examine the impact of place of residence on health outcomes, and on racial/ethnic health disparities. This will be accomplished by examining different definitions and levels of "place", and assessing the impact of each on various health outcomes and racial/ethnic disparities. The role of "place" will be examined in the development of interventions targeting racial/ethnic health disparities. Juniors and seniors Public Health Studies majors only. Gordis Teaching Fellowship course.
Instructor(s): C. Bell
Area: Social and Behavioral Sciences.

Students will gain an understanding of the epidemiology of HIV/AIDS that will serve as basis for illustrating modern epidemiologic theory, methods, and practice. Topics will include a review of the natural history and pathogenesis of HIV/AIDS, the spread and current geography of the disease, contemporaneous prevention strategies, and the impact of antiretroviral therapies at the individual and population level. Throughout, a focus on the methods and mindset of epidemiologic enquiry will be emphasized. This will include how epidemiological approaches for characterizing populations, measurements, and inference can be used to build the evidence for public health action. Students will learn through critical analysis and discussion of the peer-reviewed literature coupled with evaluations using short quizzes and a final group presentation. Gordis Teaching Fellowship course.
Recommended Course Background: AS.280.345
Prerequisites: Prerequisite/Corequisite: AS.280.350
Instructor(s): P. Rebeiro
Area: Natural Sciences, Social and Behavioral Sciences.

AS.280.413. Information Communication Technology (e/mHealth) for Health Systems Strengthening.
This course explores the emerging landscape of information and communication technology in public health, such as e/mHealth, through concepts and frameworks of health systems research with a focus on low and middle income countries (LMICs). It is designed to comprehensively address various aspects of e/mHealth including policy aspects of health systems governance, community aspects of health service delivery, economic aspects of the healthcare market, technological aspects of health information infrastructure, and individual aspects of self-monitoring/management. Multidisciplinary approaches will be encouraged to understand complex public health challenges and to suggest creative yet feasible solutions in low resource settings. Successful e/mHealth use cases across countries with various health system contexts will be introduced and discussed. The course is intended for undergraduate students interested in how information and communication technology is likely to affect health care in the future. Gordis Teaching Fellowship course open to Junior and Senior Public Health Majors only.
Instructor(s): Y. Jo
Area: Social and Behavioral Sciences.

AS.280.414. Leading Health Care Organizations.
This seminar course is designed for students who seek an understanding of how to manage health care organizations including management processes, organizational structures, types of governance models and management issues of health care delivery systems. This course is designed to provide participants with an understanding of leadership and organizational behavior within health care organizations (HCOs). In this course, students will become skilled at identifying the forces that challenge the effective management of HCOs at multiple levels – individual, group and organization. Moreover, they will become skilled at developing and analyzing efforts to improve HCOs’ performance. Through case studies, readings, in-class exercises and class discussions, participants will learn analytic frameworks, concepts, tools and skills necessary for leading and management organizational learning, innovation and overall performance improvement in health care organizations. Gordis Teaching Fellowship course open to junior and seniors only.
Instructor(s): K. Hayes
Area: Social and Behavioral Sciences.

AS.280.415. Comparative Health Systems and Health Reform.
The course explores the structural components of modern health care systems through a comparative approach. Students will develop a toolkit for analyzing how the financing, payment, and organization of health service provision determine system performance. Student teams will analyze a health system component and develop health reform recommendations for advancing the often-competing goals of improved population health, financial protection, and public satisfaction. They will also learn how to enhance the political feasibility of technically rigorous reforms through rational design and political stakeholder analysis. Theoretical frameworks utilized by international aid organizations and think tanks will be supplemented by case studies, hands-on class activities, and team projects to encourage active student learning. Gordis Teaching Fellowship course open to Junior and Senior Public Health Majors only.
Instructor(s): N. Done
Area: Social and Behavioral Sciences.
AS.280.416. Nutrition and Immunology in Chronic Disease.
This course provides an overview of basic immunology and nutrition through the review of published chronic disease research. By careful reading and critique of published literature, students will learn to interpret scientific studies on nutrition and chronic disease. This course will cover a variety of globally important chronic diseases such as type II diabetes, heart disease and cancer. Course sessions will include lectures on the basics of nutrition and immunology, seminar sessions to critically evaluate published research findings and group presentations. Recommended prerequisite: Introductory Biology. Gordis Teaching Fellowship course open to junior and seniors only.
Instructor(s): J. Fontes
Area: Natural Sciences.

This course will serve as an introduction to mental health in humanitarian emergencies. The course focuses both on mental health disorders (PTSD, anxiety, depression and substance abuse) and well-being (functionality, self-esteem, hope, and pro-social behavior). Assessment of mental health in humanitarian emergencies will include identification of risk factors and protective factors that impact mental health disorders and promote well-being. Coursework will include exploration of ways gender, age, political climate, environmental factors, and social and cultural norms impact mental health. Furthermore, the course will consider development of mental health interventions for specific cultural contexts and evaluation of the effectiveness of interventions in meeting mental health needs in the short and long-term. Class sessions will be built around case studies from various countries and include contexts of natural disasters, armed conflict and complex emergencies. Gordis Teaching Fellowship course open to junior and seniors only.
Instructor(s): M. Cherewick
Area: Social and Behavioral Sciences.

AS.280.418. Introduction to Public Health Genomics.
Advances in genomic medicine and technology have presented both opportunities and challenges for public health. Through lectures and case studies, the first half of the course will provide an historical overview and raise contemporary issues related to genomics at the individual, public and policy level. In the second half of the course, students will critically analyze psychosocial, behavioral, ethical and legal issues arising from increasingly widespread access to genetic technologies and information. Topics will cover the use of routine testing (prenatal testing, newborn screening and predictive testing for adult-onset conditions) and emerging technologies capable of whole genome sequencing, direct-to-consumer marketing of various kinds of genetic testing, pharmacogenomics and personalized medicine. Gordis Teaching Fellowship course open to junior and seniors only.
Instructor(s): Y. Guan
Area: Social and Behavioral Sciences.

AS.280.419. Introduction to Practical Data Analysis in Medicine and Public Health.
The course is designed to introduce undergraduate public health majors to the methodology of data analysis, such as how to apply previously learned statistical methods in the performance of data analysis in medical and public health research. This course is unique in that it focuses on all parts of the data analysis process, from formulating a research question to synthesizing the results. While the emphasis is placed on developing and implementing various methods of data analysis, the course will also address interpreting and evaluating the strengths and limitations of existing data analyses. Students’ understanding will be solidified through small in-class activities that explore the data analysis process and evaluations of data analyses in the scientific literature, culminating in a final data analysis project relevant to their own areas of expertise for the purpose of incorporating knowledge gained from the course into their research. Gordis Teaching Fellowship course open to sophomore, junior, and seniors who have taken AS.280.345: Public Health Biostatistics.
Prerequisites: AS.280.345
Instructor(s): T. Usher
Area: Quantitative and Mathematical Sciences.

This course examines food insecurity in low and middle income countries from a public health nutrition perspective. Students will explore food insecurity as a complex phenomenon linked to important issues in global development and public health. Recommended prior course, either Issues in International Development or Global Health Principles & Practices. Gordis Teaching Fellowship course open to junior and seniors only.
Instructor(s): B. Caswell
Area: Social and Behavioral Sciences.

AS.280.421. Telling Public Health Stories through Maps.
Maps play an increasingly central role in conceptualizing, investigating, and communicating many types of public health concerns. This semester-long course is intended for undergraduate students in their junior or senior year who are familiar with epidemiology and biostatistics. This course will develop the skills needed to create and manipulate spatial information for public health research and communication. The course also prepares students to critically evaluate spatial data and to identify the common pitfalls of map-making. Through a blend of lectures, student seminars, and lab exercises, students will examine and appreciate the history of map-making, its current uses in public health, and future directions of spatial analysis. This course involves active student participation during discussions, short responses to the readings, and culminates in an independent spatial analysis project involving Geographic Information Systems (GIS) software. Basic knowledge of biostatistics and epidemiology are recommended prerequisites. Juniors/Seniors Only. Gordis Teaching Fellowship course
Instructor(s): B. Davis
Area: Quantitative and Mathematical Sciences, Social and Behavioral Sciences.
**AS.280.422. Health Equity and Disparities: Addressing Complex Global Health Challenges.**

In this course, students will be supported and challenged to develop a personal understanding of and perspective on global health equity and disparities, and acquire a toolbox of frameworks and strategies to use in addressing them. Students will have the opportunity to be exposed to numerous examples and case studies to gain experience in assessing and addressing issues of equity in the complex, real-life problems such as those they will be facing as public health professionals. Students will review major historical and contemporary global and national initiatives to address equity issues in the health sector, including global declarations and reports as well as policies and programs that have been developed to achieve improvements in health equity in specific contexts. Application of this historical and practical knowledge and their own perspectives to new and complex situations will be fostered throughout the course. Basic knowledge of biostatistics and epidemiology and courses on global health or international public health issues recommended pre-requisites. Juniors/Seniors Only. Gordis Teaching Fellowship course

Instructor(s): M. Schleiff

Area: Social and Behavioral Sciences.

**AS.280.423. Data Visualization for Individualized Health.**

This course will explore how biostatistics and data visualization can be used to improve patient care and health outcomes. Students will learn and apply key concepts of effective data visualization to applications in individualized medicine. Teams of students will work with clinician-partners of the Hopkins Individualized Health Initiative (http://hopkinsinhealth.jhu.edu) to produce interactive web applications (http://shiny.rstudio.com) that support clinical decision-making by communicating a patient’s health state, prognosis, or expected treatment outcomes. R programming experience (AS.280.419, AS.280.346, or R programming course in coursera (https://coursera.org/course/rprog)) is necessary before the start of this course.

**Prerequisites:** Prereq: AS.280.345

Instructor(s): R. Coley

Area: Quantitative and Mathematical Sciences.

**AS.280.424. The Quest for Effective Universal Health Coverage in Low and Middle Income Countries.**

This course examines the movement to achieve effective universal health coverage with a particular focus on LMICs. It provides foundational grounding on health systems thinking to understand the key components of effective UHC and accordingly analyzes country cases to demonstrate lessons from health reforms in five LMICs.

Instructor(s): A. Bhadelia

Area: Social and Behavioral Sciences.


An elective for upper-level public health studies students with a strong biology background that reviews the basics of immunology and cancer biology, and then delves into how treatments at the interface are sparking a paradigm shift in how we understand and treat cancer. Special interest will be taken in the public health repercussions of this change in thinking and treatment. Students apply this knowledge by analyzing topics of current and potential immunotherapies such as cancer vaccinations, adoptive cell transfer therapies, immune checkpoint inhibitors, and more. Course format will be a combination of lecture and active learning activities such as facilitated discussions, case study analysis, and role-plays of system actions. Juniors/Seniors only.

**Prerequisites:** AS.020.151 OR AS.020.152 OR AS.020.243 OR AS.020.123 OR AP Biology

Instructor(s): J. Gordy

Area: Natural Sciences.

**AS.280.426. Ethics of Obesity Prevention.**

This course introduces undergraduate PHS students to ethical issue of obesity prevention in public health, and how these issues have influenced the success or failure of past and current intervention efforts. Students explore the multiple perspectives of each issue, and use an ethical framework to learn how to address the ethical challenges associated with the development of obesity intervention programs and policy. Juniors/Seniors only.

Instructor(s): L. Redmond

Area: Social and Behavioral Sciences.

**AS.280.427. Communicating Science: Skills to Analyze and Communicate Science News.**

Science communication is challenging. Experts are seldom trained to translate jargon in everyday language. In this course students will expand their knowledge of the biology basics of several public health issues, develop the critical thinking needed to assess health science reporting, and practice science communication skills.

**Prerequisites:** Prereq: AS.020.151 OR AS.020.152 OR AS.020.243 OR AS.020.123 OR AP Biology.

Instructor(s): N. Martin

Area: Humanities, Natural Sciences.

**AS.280.495. Honors in Public Health - Seminar.**

Using lectures, oral presentations, and writing assignments, this seminar is designed to assist Public Health Studies majors in writing a senior thesis. Students will formulate their topics, develop research skills, and address issues of professional ethics. Participating in this seminar is required for students pursuing honors in Public Health Studies. Permission Required.

Instructor(s): J. Schrack; K. Gebo

Area: Social and Behavioral Sciences.

**AS.280.499. Honors in Public Health.**

A research methods seminar to prepare students doing honors in Public Health Studies. Permission Required.

Instructor(s): J. Schrack; K. Gebo

Area: Social and Behavioral Sciences.

**AS.280.500. Applied Experience-PH.**

This is a supervised, hands-on experience working with public health professionals. Students will complete 80 hours of applied work and will submit a synthesizing assignment at the end of the term. Please contact your PHS Advisor for complete details. Permission Required. Public Health Majors Only.

Instructor(s): J. Balabis; L. Folda; M. Smart.
Permission Required. Public Health majors only.
Instructor(s): J. Balabas; K. Gebo; L. Folda; M. Smart.

Permission Required. S/U only.
Instructor(s): J. Balabas; L. Folda; M. Smart.

Instructor(s): K. Gebo; M. Smart.

Permission Required.
Instructor(s): K. Gebo; M. Smart.

Public Health majors only. Permission Required.
Instructor(s): L. Folda; M. Smart; R. Shingles; Staff.

Consult the public health studies adviser for procedure. Permission Required.
Instructor(s): J. Balabas; K. Gebo; L. Folda; M. Smart.

Instructor(s): K. Gebo; M. Smart.

Restricted to public health studies majors. Consult the public health studies adviser for procedure. Permission Required.
Instructor(s): K. Gebo; M. Smart.

AS.280.519. Public Health Practice.
Specialized training course/experience for students who have been selected to become members of the PEEPs (Preventative Education and Empowerment for Peers), a peer education group based out of the Center for Health Education and Wellness (CHEW). The experience will focus on knowledge, skill and application of college health issues including: health promotion theory, body image, sexual health, alcohol and other drugs, and stress management. Permission Required. S/U Only.
Instructor(s): B. Schubert.

AS.280.520. Public Health Practice.
This course is a specialized training course/experience for students who have been selected to become members of the PEEPs (Preventative Education and Empowerment for Peers), a peer education group based out of the Center for Health Education and Wellness (CHEW). The experience will focus on knowledge, skill and application of college health issues including: health promotion theory, body image, sexual health, alcohol and other drugs, and stress management. Permission Required. S/U only.
Instructor(s): B. Schubert.

AS.280.530. Community Based Learning—Advanced Practicum in Community Health.
This course is designed to enable students who have already been volunteering in a community health placement either through 280.399 or an Applied Experience to build on this experience in the spring semester. Students eligible to enroll in this course will have previously completed a semester-long volunteering experience and have already made arrangements with that site to continue to volunteer for a minimum of 60 hours in spring 2014 semester. All students meet as a group every other Monday from 5:00-6:30 pm, starting January 27, 2014. By that meeting all students will be expected to have confirmed with their placement sites that they will be continuing. Class time will be used for reflections, training exercises, oral presentations, and group projects. Attendance at the first session is mandatory and registration forms will be completed at this time. Instructor Permission Required.
Instructor(s): J. Goodyear; L. Bone.

Instructor(s): J. Balabas; K. Gebo; L. Folda; M. Smart.

Instructor(s): K. Gebo; M. Smart.

Instructor(s): K. Gebo; M. Smart.

Instructor(s): J. Balabas; M. Smart.

AS.280.590. Internship—Summer.
Instructor(s): J. Goodyear; K. Gebo; L. Folda; M. Smart.

AS.280.596. Independent Study—Summer.
Instructor(s): J. Goodyear; L. Folda; M. Smart.

Instructor(s): G. Ball; J. Goodyear; K. Gebo; R. Pearlman.

Instructor(s): B. Morgan; J. Goodyear; K. Gebo; T. Schroer.

Cross Listed Courses

Anthropology

Metaphors of health and illness; individual and social. The body in pain and the body politic. Ethnographies of historical memory vis-à-vis medicine, epidemics, sacredness, shamanism, terror, humanitarianism, truth and reconciliation.
Instructor(s): J. Obarrio
Area: Humanities, Social and Behavioral Sciences.

The course critically examines the techniques, practices, and experiences of global health policies and programs worldwide, and the effects they have on individuals, families, communities, and states.
Dean’s Teaching Fellowship Course
Instructor(s): L. Reynolds
Area: Humanities, Social and Behavioral Sciences.

Area: Humanities, Social and Behavioral Sciences.
AS.070.327. Poverty's Life: Anthropology of Health & Economy.
Medicine, economics, and ethics have profoundly shaped debates on poverty. This course analyzes these debates and tracks the relationships between body, economy, and the everyday. How can anthropological reasoning and methods inform approaches to health and economic scarcity and insecurity?
Instructor(s): C. Han
Area: Humanities, Social and Behavioral Sciences.

AS.070.329. Care and Affliction in the Everyday.
How are illness, suffering, and potentials for well-being shaped through our everyday relations? In this seminar, we will explore how relations of care make and unmake lives in contexts of inequality and precariousness. We examine how a multiplicity of social ties, from kinship to neighborhood networks, articulates with institutional margins, and mediates violence, scarcity, and material realities of disease and illness. Cross-listed with Public Health Studies
Area: Humanities, Social and Behavioral Sciences.

History
AS.100.333. Global Public Health Since World War II.
Globalization has dramatically reshaped the world economy, providing great advantages to some but leaving poor nations to struggle with hunger, disease and death on a daily basis. This course explores the impact of globalization on public health in the developed and the developing nations since 1945. Cross-listed with Public Health Studies
Instructor(s): B. Morgan; L. Galambos
Area: Humanities, Social and Behavioral Sciences.

AS.100.411. Readings in the History of Public Health in the 20th and 21st Centuries.
The students will read major and some minor works in the history of global public health and will each develop their own concept of how and why the major institutions, professions, and practices associated with public health have evolved over the past long century. To help the students focus on their ideas, they will write three essays on particular aspects of the history.
Instructor(s): L. Galambos
Area: Humanities, Social and Behavioral Sciences.

History of Science Technology
AS.140.105. History of Medicine.
Course provides an overview of the medical traditions of six ancient cultures; the development of Greek and Islamic traditions in Europe; and the reform and displacement of the Classical traditions during the Scientific Revolution.
Instructor(s): G. Pomata; M. Hanson
Area: Humanities, Social and Behavioral Sciences.

AS.140.106. History of Modern Medicine.
The history of Western medicine from the Enlightenment to the present, with emphasis on ideas, science, practices, practitioners, and institutions, and the relationship of these to the broad social context.
Instructor(s): J. Greene
Area: Humanities, Social and Behavioral Sciences.

AS.140.146. History of Public Health in East Asia.
This course examines the history of disease, epidemics, and public health responses in East Asia from the 17th-20th centuries. This public health history emphasizes the interactions, connections, and comparisons among China, Japan, Korea, and Taiwan.
Instructor(s): M. Hanson
Area: Humanities, Social and Behavioral Sciences.

AS.140.304. Medicine for and by Women in Early Modern Europe.
This course will examine women's role in early modern European medicine through the reading of early modern medical texts written for or by women. The course is meant for students interested in women's history, the history of medicine, European history.
Instructor(s): G. Pomata
Area: Humanities, Social and Behavioral Sciences.

Explores historical and current problems relating to the environment and human health, with emphasis on the Chesapeake region and Baltimore. Students write research papers.
Instructor(s): S. Kingsland
Area: Humanities, Social and Behavioral Sciences.

Philosophy
AS.150.219. Introduction to Bioethics.
Introduction to a wide range of moral issues arising in the biomedical fields, e.g. physician-assisted suicide, human cloning, abortion, surrogacy, and human subjects research. Cross-listed with Public Health Studies.
Instructor(s): H. Bok
Area: Humanities, Social and Behavioral Sciences.

Economics
AS.180.252. Economics of Discrimination.
This course examines labor market discrimination by gender, race and ethnicity in the United States. What does the empirical evidence show, and how can we explain it? How much of the difference in observed outcomes is driven by differences in productivity characteristics and how much is due to discrimination? How have economists theorized about discrimination and what methodologies can be employed to test those theories? What has been the impact of public policy in this area; how do large corporations and educational institutions respond; and what can we learn from landmark lawsuits? The course will reinforce skills relevant to all fields of applied economics, including critical evaluation of the theoretical and empirical literature, the reasoned application of statistical techniques, and analysis of current policy issues.
Prerequisites: AS.180.102
Instructor(s): B. Morgan
Area: Social and Behavioral Sciences.

Application of economic concepts and analysis to the health services system. Review of empirical studies of demand for health services, behavior of providers, and relationship of health services to population health levels. Discussion of current policy issues relating to financing and resource allocation.
Prerequisites: AS.180.102
Instructor(s): D. Bishai
Area: Social and Behavioral Sciences.

AS.180.390. Health Economics & Developing Countries.
Prerequisites: AS.180.301
Instructor(s): M. Gersovitz
Area: Social and Behavioral Sciences.
Political Science

**AS.190.354. Politics of Health Policy.**
Traces the evolution of the American Health care system, emphasis on the political forces that shape public and private provision of health care in the United States.
Instructor(s): P. Longman
Area: Social and Behavioral Sciences.

**AS.190.405. Food Politics.**
This course examines the politics of food at the local, national, and global level. Topics include the politics of agricultural subsidies, struggles over genetically modified foods, government efforts at improving food safety, and issues surrounding obesity and nutrition policy. Juniors, seniors, and graduate students only. Cross-listed with Public Health Studies.
Instructor(s): A. Sheingate
Area: Social and Behavioral Sciences.

Public Policy

**AS.195.477. Intro To Urban Policy.**
Perm. Req’d. 195.477 & 195.478 must be taken together by undergraduates Cross-listed with Political Science, Sociology, Public Health Studies, and Geography and Environmental Engineering
Instructor(s): S. Newman
Area: Social and Behavioral Sciences.

**AS.195.478. Urban Policy Internship.**
195.478 & 195.477 must be taken together by undergraduates Cross-listed with Political Science, Sociology, Public Health Studies, and Geography and Environmental Engineering
Instructor(s): S. Newman.

German Romance Languages Literatures

**AS.211.416. Visual Languages in Medical Knowledge.**
This interdisciplinary course, co-taught by professor Veena Das (Anthropology) and Research professor and filmmaker Bernadette Wegenstein (German and Romance Languages and Literatures) will track the mediation of images in the making of medical knowledge and show how sensory knowledge is incorporated or transformed in the process. Co-listed with 214.616 and 070.416
Instructor(s): B. Wegenstein; V. Das
Area: Humanities.

**AS.214.616. Visual Languages in Medical Knowledge.**
This interdisciplinary course, co-taught by professor Veena Das (Anthropology) and Research professor and filmmaker Bernadette Wegenstein (German and Romance Languages and Literatures) will track the mediation of images in the making of medical knowledge and show how sensory knowledge is incorporated or transformed in the process. Co-listed with 214.616 and 070.416
Instructor(s): B. Wegenstein; V. Das
Area: Humanities.

Writing Seminars

**AS.220.309. Writing Healthy Baltimore.**
Students will explore public health issues in Baltimore and then write about them first in short pieces, and then in longer, polished works. The framework will be the mayor’s Healthy Baltimore 2015 initiative – launched in 2011 to address the city’s top-10 public health problems, including obesity, smoking, drug and alcohol abuse, STDs, cancer, and environmental health hazards. Students will study the initiative and its historical context; examine data sets; explore where and how the initiative intersects with public health practitioners and advocacy groups at the neighborhood level; and write what they learn in different formats, including essays, breaking news, and substance analysis.
Students will then “workshop” each other’s papers.
Instructor(s): K. Masterson
Area: Humanities.

Sociology

**AS.230.150. Issues in International Development.**
Why do billions of people continue to suffer from poverty? Who is most likely to change this situation, what strategies should they follow, what kinds of institutions should they put into place, and what kinds of obstacles stand in the way? This course will introduce the main theoretical perspectives, debates, and themes in the field of international development since the mid-20th century. It has three sections. The first section focuses on debates about the optimal conditions and strategies for generating economic growth and on the relationship between growth, inequality, and human welfare. The second section presents micro-level assessments of various development interventions. The third section considers the role of civil society and political movements in shaping development and social change in the 21st century. Freshmen and sophomores only.
Instructor(s): M. Levien
Area: Social and Behavioral Sciences.

**AS.230.225. Population, Health and Development.**
This course will cover the major world population changes in the past century as well as the contemporary situation and projections for this century. Topics include rapid population growth, the historical and continuing decline of death and birth rates, contraceptive methods as well as family planning and child survival programs, population aging, urbanization, population and the environment and the demographic effects of HIV/AIDS.
Instructor(s): S. Becker
Area: Social and Behavioral Sciences.

**AS.230.341. Sociology of Health and Illness.**
This course introduces students to medical sociology, which is the application of the sociological perspective to health and health care. Major topics include stress, social epidemiology, and the social organization of health care.
Instructor(s): E. Agree
Area: Social and Behavioral Sciences.

Earth Planetary Sciences

**AS.270.107. Introduction to Sustainability.**
Will introduce interactions between global environment and humans, discuss meaning of sustainability, and introduce use of tools to attain sustainability such as policy, law, communication, marketing, research, advocacy, international treaties.
Instructor(s): C. Parker
Area: Natural Sciences.
This course explores the distribution and abundance of organisms and their interactions. Topics include dynamics and regulation of populations, population interactions (competition, predation, mutualism, parasitism, herbivory), biodiversity, organization of equilibrium and non-equilibrium communities, energy flow, and nutrient cycles in ecosystems. Field trip included. Permission of instructor.
Prerequisites: AS.270.103 or permission of instructor
Instructor(s): K. Szlavecz
Area: Natural Sciences.

This course will investigate the policy and scientific debate over global warming. It will review the current state of scientific knowledge about climate change, examine the potential impacts and implications of climate change, explore our options for responding to climate change, and discuss the present political debate over global warming.
Prerequisites: AS.270.103 or permission
Instructor(s): B. Zaitchik
Area: Natural Sciences.

AS.271.107. Introduction to Sustainability.
Will introduce interactions between global environment and humans, discuss meaning of sustainability, and introduce use of tools to attain sustainability such as policy, law, communication, marketing, research, advocacy, international treaties.
Instructor(s): C. Parker
Area: Natural Sciences.

Prereq: 270.103 or permission of instructor. This course will investigate the policy and scientific debate over global warming. It will review the current state of scientific knowledge about climate change, examine the potential impacts and implications of climate change, explore our options for responding to climate change, and discuss the present political debate over global warming.
Instructor(s): B. Zaitchik; D. Waugh
Area: Natural Sciences.

Interdepartmental

With the creation of President Barack Obama's Task Force on Childhood Obesity, there is finally a national focus on the importance of childhood nutrition. First Lady Michelle Obama spearheads the "Let's Move!" initiative, dedicated to the goal of eradicating childhood obesity through an emphasis on diet and physical activity. This class will tackle the issue of food, nutrition and health from the ground up; looking at multiple behavioral, cultural, and environmental factors that influence what and why we eat. We will also look at how our food systems and eating habits impact the health of individuals, communities, our country, and the world. In this two week session students will have a variety of experiences including trips to a Baltimore City urban farm, the Maryland Food Bank, farmer's markets, one of Baltimore's traditional public markets, and a sustainably-sourced restaurant (the famed Woodberry Kitchen). Students will hear a variety of guest speakers from the academic and government sectors.
Instructor(s): A. Kharamats; N. Budd
Area: Social and Behavioral Sciences.

Center for Africana Studies

AS.362.325. The Role of "Place" in Racial Ethnic Health Disparities.
This course will introduce students to racial/ethnic health disparities, the need to examine the role of "place", and how this leads to racial/ethnic health disparities. The course will first examine large-scale measures of place, then down to smaller scale measures. Students will discuss various theories generally associated with racial/ethnic health disparities, as well as the extension of "place" theories to this topic. Students will apply this knowledge through various assignments and activities about racial/ethnic health disparities of interest. These activities include class discussions, group assignments and development of interventions and solution-focused policy recommendations. This course is being offered for sophomores, juniors and seniors who have completed a statistic course or who have received permission from the instructor.
Prerequisites: Students may receive credit for AS.280.411 or AS.362.325, but not both.
Instructor(s): C. Bell
Area: Humanities.

AS.362.371. The Public Health Crisis in Africa. 3 Credits.
This course examines the historical and current public health crises in Africa. Topics covered include infectious diseases and viral outbreaks, water and food access, sanitation, education, behavioral health, gender equality, health care and health care access, as well as the link between culture, economics and health. Introduction to Epidemiology is recommended but not required.
Instructor(s): C. Furr-Holden
Area: Humanities, Social and Behavioral Sciences.

Geography Environmental Engineering

EN.570.108. Introduction Environmental Engineering.
Overview of environmental engineering including water/air quality issues, water supply/ wastewater treatment, hazardous/solid waste management, pollution prevention, global environmental issues, public health considerations/environmental laws, regulations and ethics.Cross listed with Public Health Studies.
Instructor(s): H. Alavi
Area: Engineering.

Entrepreneurship and Management

So many big and seemingly intractable problems inhibit progress and diminish quality of life especially in and around urban communities. Surely there are ways to begin to tackle some of these problems, if we approach them from a multi-disciplinary perspective. This course provides that opportunity as students, who work primarily in teams, apply theory and ingenuity to investigate problems, propose solutions or invent devices that address some of these problems. Class time is spent in lecture, discussion, and applied community projects to master content. Time will be spent participating on teams and working in community organizations in addition to class.
Area: Social and Behavioral Sciences.

AS.360.121. Discover Hopkins Health Studies.