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 such as gender, poverty, and education that contribute to health outcomes. Public health has close ties with medicine through clinical and biomedical research and healthcare 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 coursework at Homewood includes Introduction to Public Health, Research Methods in Public Health, Fundamentals of Epidemiology, Environment and Your Health, Fundamentals of Health Policy and Management, Biostatistics, and a course in Social and Behavioral Health. Students also take coursework in Social Sciences, Biology and Calculus. Students will select additional public health coursework from a range of options that include the global health, demography, health economics, medical sociology, history, and politics. The major is flexible and easily adapted to further course work in the natural and social sciences. 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 research or community setting. Find more information at http://krieger.jhu.edu/publichealth/applied-experience/

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. Undergraduates may take classes in any of the 10 departments at JHSPH. Many students also get involved in ongoing research projects at JHSPH.

Available coursework 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 at least 3.5. Public Health Honors students complete an independent research project under the supervision of a JHU faculty member and with the guidance of the Honors seminar instructor. 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 their PHS advisor no later than 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 runs a public-health specific program during Intersession (3 weeks) in Uganda, which 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. For more information, go to krieger.jhu.edu/publichealth/academics/study-abroad/.

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.

**Board Members**

**Krieger School of Arts and Sciences**

Andy Cherlin; Professor (Sociology); Benjamin H. Griswold III Professor of Public Policy

Joel Schildbach; Vice Dean for Undergraduate Education; Professor (Biology)
Adam Sheingate; Associate Professor (Political Science); Advisory Board Chair

Johns Hopkins Bloomberg School of Public Health
Colleen Barry; Fred and Julie Soper Professor in Health Policy and Management

Marie Diener-West; Abbey-Merrell Professor of Biostatistics; Chair, Master of Public Health Program

John Groopman; Anna M. Baetjer Professor in Environmental Health and Engineering

Laura Morlock; Executive Vice Dean for Academic Affairs and Professor in Health Policy and Management

James Yager; Professor (Environmental Health and Engineering)

Scott Zeger; Professor (Biostatistics); Professor (Epidemiology)

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

All courses must be taken for a letter grade and not S/U, unless the course is not offered as a graded course. You must earn a C- or higher to count courses toward your Public Health Studies Degree. Hyperlinks are included to view all course descriptions and requirements. Major requirements are as follows:

Foundation Courses

Quantitative:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS.110.106</td>
<td>Calculus I (Biology and Social Sciences)</td>
<td>4</td>
</tr>
<tr>
<td>or AS.110.108</td>
<td>Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>

Natural Science: 8-10

Two Biology Lecture Courses From List Below: *

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS.020.151</td>
<td>General Biology I</td>
</tr>
<tr>
<td>or AS.020.152</td>
<td>General Biology II</td>
</tr>
<tr>
<td>or AS.020.303</td>
<td>Genetics</td>
</tr>
<tr>
<td>or AS.020.305</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>or AS.020.306</td>
<td>Cell Biology</td>
</tr>
<tr>
<td>or AS.020.374</td>
<td>Comparative Animal Physiology</td>
</tr>
<tr>
<td>or AS.280.161</td>
<td>Applications of Biological Concepts in Public Health</td>
</tr>
</tbody>
</table>

One Biology Lab Course From List Below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS.020.153</td>
<td>General Biology Laboratory I</td>
</tr>
<tr>
<td>or AS.020.154</td>
<td>General Biology Lab II</td>
</tr>
<tr>
<td>or AS.020.315</td>
<td>Biochemistry Project lab</td>
</tr>
<tr>
<td>or AS.020.316</td>
<td>Cell Biology Lab</td>
</tr>
<tr>
<td>or AS.020.340</td>
<td>Developmental Genetics Lab</td>
</tr>
<tr>
<td>or AS.020.377</td>
<td>Comparative Physiology Lab</td>
</tr>
<tr>
<td>or AS.250.253</td>
<td>Protein Engineering and Biochemistry Lab</td>
</tr>
<tr>
<td>or AS.250.254</td>
<td>Protein Biochemistry and Engineering Laboratory</td>
</tr>
</tbody>
</table>

Social Science: Select two introductory social science courses from Table 1. Other courses may apply with advisor approval. These courses must be from two different departments.

Public Health Studies Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS.280.101</td>
<td>Introduction to Public Health (Fall &amp; Spring)</td>
<td>3</td>
</tr>
<tr>
<td>AS.280.240</td>
<td>Research Methods in Public Health (Fall &amp; Spring)</td>
<td>4</td>
</tr>
<tr>
<td>AS.280.335</td>
<td>The Environment and Your Health (Fall &amp; Spring)</td>
<td>3</td>
</tr>
<tr>
<td>AS.280.340</td>
<td>Fundamentals of Health Policy &amp; Management (Spring)</td>
<td></td>
</tr>
<tr>
<td>AS.280.345</td>
<td>Public Health Biostatistics (Fall)</td>
<td>4</td>
</tr>
<tr>
<td>AS.280.350</td>
<td>Fundamentals of Epidemiology (Fall &amp; Spring)</td>
<td>4</td>
</tr>
<tr>
<td>AS.230.341</td>
<td>Sociology of Health and Illness</td>
<td>3</td>
</tr>
<tr>
<td>or AS.280.360</td>
<td>Clinical &amp; Public Health Behavior Change</td>
<td></td>
</tr>
</tbody>
</table>

Intermediate Public Health Courses at Homewood
One course at the 200-400 level focusing on social and behavioral aspects of public health from the list below. Other courses may apply with advisor approval.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS.230.399</td>
<td>Community Based Learning - Practicum Community Health Care</td>
</tr>
</tbody>
</table>

Applied Experience
Public Health Studies majors will complete one (1) pre-approved experience or one of the courses that include the hands-on work as part of the course.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS.280.500</td>
<td>Applied Experience-Public Health ***</td>
<td>1-3</td>
</tr>
<tr>
<td>or AS.280.347</td>
<td>Health Data Analysis Practicum</td>
<td></td>
</tr>
<tr>
<td>or AS.280.399</td>
<td>Community Based Learning - Practicum Community Health Care</td>
<td></td>
</tr>
<tr>
<td>AS.280.210</td>
<td>Program Abroad: Uganda-Childhood, Health and Society) offered during Intersession only</td>
<td></td>
</tr>
</tbody>
</table>

Courses at Johns Hopkins Bloomberg School of Public Health (JHSPH) **

* Other biology courses may apply with advisor approval.
** All courses must be at least 3 credits and only 2 Gordis Teaching Fellowship (GTF) courses may apply (AS.280.4xx courses).
*** Please review the Public Health Studies website to further understand the applied experience requirements.
**** Courses are taken at the Johns Hopkins Bloomberg School of Public Health in the student’s final year. Students take 15 JHSPH credits, which is the equivalent of 10 Homewood credits. Blended courses may count for this requirement, Independent Research and Special Studies will not. Online courses will count toward you total number of credits needed to graduate, but will not count toward the 15 credits needed to fulfill this specific requirement. Within the 15 credits, students must create an 8 credits focus in one particular area, topic, or department.

Honors in Public Health Studies
An honors option is available to Public Health Studies seniors with a major GPA of 3.5. Public Health Honors students complete an independent research project under the supervision of a JHU faculty member and the guidance of the Honors seminar instructor. Students register for (http://e-catalog.jhu.edu/search/?P=AS.280.495) Honors in Public Health - Seminar in the fall and AS.280.499 (http://e-catalog.jhu.edu/search/?P=AS.280.499) Honors in Public Health - Seminar in the spring. Interested students should discuss their plans with their PHS advisor no later than the spring of their junior year. Students may not count the honors courses towards any other requirement of the major; they are in addition to major requirements.

Sample Program
While there are many paths through the requirements, a typical program might include the following sequence of Public Health Studies requirements:
### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS.280.101 Introduction to Public Health</td>
<td>3</td>
<td>AS.020.152 General Biology I</td>
<td>3</td>
</tr>
<tr>
<td>AS.020.151 General Biology I</td>
<td>3</td>
<td>Introductory Level Social Science from Table 1</td>
<td>3</td>
</tr>
<tr>
<td>AS.020.153 General Biology Laboratory I</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS.110.106 Calculus I (Biology and Social Sciences)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introductory Level Social Science from Table 1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS.280.345 Public Health Biostatistics</td>
<td>4</td>
<td>AS.280.240 Research Methods in Public Health</td>
<td>4</td>
</tr>
<tr>
<td>AS.280.335 The Environment and Your Health</td>
<td>3</td>
<td>AS.280.350 Fundamentals of Epidemiology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AS.280.340 Fundamentals of Health Policy Management</td>
<td>3</td>
</tr>
</tbody>
</table>

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### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social/Behavioral Aspects of Public Health Course</td>
<td>3</td>
<td>AS.280.500 Applied Experience-Public Health (in not taken in Fall)</td>
<td>1</td>
</tr>
<tr>
<td>Upper Level Public Health Elective (200-400 level)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3 4

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloomberg School of Public Health Courses</td>
<td>4-6</td>
<td>Bloomberg School of Public Health Courses</td>
<td>4-6</td>
</tr>
<tr>
<td>Upper Level Public Health Elective (200-400 level)</td>
<td>3</td>
<td>Upper Level Public Health Elective (200-400 level)</td>
<td>3</td>
</tr>
</tbody>
</table>

7-9 7-9

Total Credits: 59-63

### Table 1

Approved Introductory Level Social Science Courses. Students matriculating after 2017 or later must take these from two different departments:

| AS.060.155                  | Expository Writing: Introduction to the Research Paper - Controversies in Adolescence | 3       |
| AS.070.132                  | Invitation to Anthropology                                                           | 3       |
| AS.140.105                  | History of Medicine                                                                 | 3       |
| AS.140.106                  | History of Modern Medicine                                                           | 3       |
| AS.140.146                  | History of Public Health in East Asia                                               | 3       |
| AS.150.219                  | Introduction to Bioethics                                                           | 3       |
| AS.180.101                  | Elements of Macroeconomics                                                          | 3       |
| AS.180.102                  | Elements of Microeconomics                                                           | 3       |
| AS.190.220                  | Global Security Politics                                                            | 3       |
| AS.190.284                  | Classics of Political Theory: Political Freedom                                    | 3       |
| AS.200.101                  | Introduction To Psychology                                                          | 3       |
| AS.200.110                  | Introduction to Cognitive Psychology                                                | 3       |
| AS.200.132                  | Introduction to Developmental Psychology                                            | 3       |
| AS.200.133                  | Introduction to Social Psychology                                                   | 3       |
| AS.200.209                  | Personality                                                                        | 3       |
| AS.200.212                  | Abnormal Psychology                                                                 | 3       |
| AS.200.222                  | Positive Psychology                                                                 | 3       |
| AS.230.101                  | Introduction to Sociology                                                           | 3       |
| AS.230.150                  | Issues in International Development                                                 | 3       |
| AS.271.107                  | Introduction to Sustainability                                                      | 3       |
| AS.360.247                  | Introduction to Social Policy: Baltimore and Beyond                                  | 3       |
| EN.570.108                  | Introduction to Environmental Engineering and Design                                 | 4       |
| EN.570.110                  | Introduction to Engineering for Sustainable Development                              | 3       |

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

### Faculty

#### Program Director
Maria Bulzacchelli
PhD; Assistant Research Professor; Director, Undegraduate Program in Public Health Studies

#### Assistant Director
Katherine Henry
PhD; Head of Advising (Public Health Studies); Academic Advisor

#### Academic Advisor
Cara McNamara
M.P.H.; Academic Advisor (Public Health Studies)

#### Experiential Learning Specialist
Keri Frisch
MS; Experiential Learning Specialist (Public Health Studies)

### Faculty

Stanley Becker
Professor (Population, Family, and Reproductive Health)

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

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

Joseph Bressler
Professor (Environmental Health and Engineering)

Amelia Buttress
Assistant Scientist (Health, Behavior and Society)

Ann Herbert
School of Public Health Post-Doctoral Student (Health, Behavior and Society)
Leah Jager
Assistant Scientist (Biostatistics).

Megan Latshaw
Assistant Scientist (Environmental Health and Engineering)

Philip Leaf
Professor (Mental Health).

Catherine Maulsby
Associate Scientist (Health, Behavior and Society)

Heather McKay
Research Associate (Epidemiology)

Michael Schneider
Research Associate (Epidemiology)

Margaret Taub
Assistant Scientist (Biostatistics).

Roland Thorpe
Associate Professor (Health, Behavior and Society)

Jon Vernick
Professor (Health Policy and Management)

Peter Winch
Professor (International Health).

Barry Zirkin
Professor (Biochemistry and Molecular Biology).

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

**Courses**

**AS.280.101. Introduction to Public Health. 3.0 Credits.**

This course provides an overview of the field of public health. Topics include the major causes of morbidity and mortality; the socioeconomic, behavioral, and environmental factors that affect health; the analytical methods used in the field; the role of government in protecting the public's health; key features of the U.S. health care system; and current challenges in the field. The course also introduces students to the basic conceptual models and approaches that are central to public health practice. This course is restricted to freshmen and sophomores. Other students may enroll with the instructor permission. Your enrollment may be withdrawn at the discretion of the instructor if you don't meet one of those criteria.

**Prerequisites:** NA

**Corequisites:** NA

 Instructor(s): M. Bulzacchelli

 Area: Social and Behavioral Sciences

 **AS.280.120. Lectures on Public Health and Wellbeing in Baltimore. 1.0 Credit.**

An introduction to Urban Health with Baltimore as a case study: wellbeing, nutrition, education, violence and city-wide geographic variation. Lectures by JH Faculty, local government/service providers and advocates.

**Prerequisites:** NA

**Corequisites:** NA

 Instructor(s): P. Leaf

 Area: Social and Behavioral Sciences

 **AS.280.161. Applications of Biological Concepts in Public Health. 3.0 Credits.**

This course explores the basic biology concepts relevant to public health. Case studies will be used to examine key scientific principles and their application. This course is designed for public health students who are not intending to pursue a career in natural sciences or medicine. This course satisfies the Public Health Studies Biology requirement, but does not satisfy Pre-Med requirement. All freshman must have taken or be currently enrolled in AS.280.101 to register. Department Approval Required.

**Prerequisites:** AS.020.151

**Corequisites:** NA

 Instructor(s): K. Henry

 Area: Natural Sciences

 **AS.280.225. Population, Health and Development. 3.0 Credits.**

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. This course is restricted to Public Health Studies majors. Students minoring in Study of Women, Gender, and Sexuality can register with instructor approval.

**Prerequisites:** NA

**Corequisites:** NA

 Instructor(s): S. Becker

 Area: Social and Behavioral Sciences

 **AS.280.232. Applications of Precision Medicine in Public Health. 1.0 Credit.**

This course will (1) introduce students to principles of precision medicine (PM) across the care continuum and (2) engage students to think critically about how PM will change the medical and public health landscape. Students will learn about the PM initiative and current examples of PM in disease prevention, diagnosis, treatment and surveillance. Students will identify challenges associated with incorporating PM into our health care system and discuss strategies to mitigate such challenges.

**Prerequisites:** NA

**Corequisites:** NA

 Instructor(s): M. Roberts

 Area: NA

 NA.
AS.280.235. Public Health Cardiology. 1.0 Credit.
This course will provide a hands-on overview of the modern science behind cardiovascular disease. Topics will include the epidemiology of cardiovascular disease, prevention, interventions and risk factors that impact outcomes. Students will learn hands on skills to recognize and treat heart attacks including basic ECG recognition, cardiopulmonary resuscitation (CPR) and current treatment algorithms.
Prerequisites: NA
Corequisites: NA
Instructor(s): A. Rosenblum; C. Wend
Area: Natural Sciences, Social and Behavioral Sciences

AS.280.240. Research Methods in Public Health. 4.0 Credits.
This course examines the research process, with an emphasis on formulating research questions, critically evaluating published research, and drawing objective conclusions from a body of scientific literature. Students conduct a systematic review of the scientific literature related to a public health issue. Labs focus on developing and documenting a sound review methodology and communicating the review findings effectively in writing.
Prerequisites: AS.280.101 AND (AS.280.345 OR AS.200.314 OR EN.550.230 OR EN.550.310 OR EN.550.311 OR EN.550.420 OR EN.550.430 OR EN.560.348 OR EN.553.211)
Corequisites: NA
Instructor(s): C. Maulsby; Z. Hendrickson
Area: Social and Behavioral Sciences
Writing Intensive.

AS.280.312. Media, Politics, and Evidence in the History of Public Health. 3.0 Credits.
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: AS.280.350
Corequisites: NA
Instructor(s): A. Buttress
Area: Humanities, Social and Behavioral Sciences
Writing Intensive.

AS.280.320. Seminar on Public Health and Well-being in Baltimore. 3.0 Credits.
Seminar combines lectures from AS.280.120 with additional readings and discussion to more deeply address urban health issues. The course will revolve around student projects that can impact health and wellbeing in Baltimore. If you are accepted for this course do NOT register for AS.280.120. Course registration is by instructor permission only. You will be asked to provide a brief description of a project in order to determine your potential linkage with this course. This course is utilizing the online active approval process. Permission requests should be submitted via SIS Self-Service upon the opening of your registration period. The instructor will review requests and approve registrations using SIS Self-Service for Faculty. Please note, a request does not guarantee registration into the course. Status inquiries should be addressed to the instructor or departmental administrator.
Prerequisites: NA
Corequisites: NA
Instructor(s): P. Leaf
Area: Social and Behavioral Sciences

AS.280.325. Public Health in South Africa. 3.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): M. Smart
Area: Social and Behavioral Sciences

AS.280.326. Community-Based Learning in South Africa. 3.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): M. Smart
Area: Social and Behavioral Sciences

AS.280.329. The Good, the Bad, and the Ugly: Scientific Writing in Public Health. 3.0 Credits.
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
Corequisites: NA
Instructor(s): R. Thorpe
Area: Social and Behavioral Sciences
Writing Intensive.
AS.280.335. The Environment and Your Health. 3.0 Credits.
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. Majority of seats are reserved for Public Health Studies majors.
Prerequisites: NA
Corequisites: NA
Instructor(s): J. Bressler, J. Yager; M. Latshaw
Area: Natural Sciences
NA.

AS.280.340. Fundamentals of Health Policy & Management. 3.0 Credits.
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. Public Health Studies majors have 1st priority for enrollment. Your enrollment may be withdrawn at the discretion of the PHS program if you are not a PHS major.
Prerequisites: AS.280.101
Corequisites: NA
Instructor(s): J. Vernick
Area: Social and Behavioral Sciences
NA.

AS.280.345. Public Health Biostatistics. 4.0 Credits.
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 OR EN.560.348
Corequisites: NA
Instructor(s): L. Jager; M. Taub
Area: Quantitative and Mathematical Sciences
NA.

AS.280.346. Introduction to R Programming for Public Health. 1.0 Credit.
Formerly known as Advanced Biostatistics Laboratory, 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: AS.280.345
Corequisites: NA
Instructor(s): L. Jager; M. Taub
Area: Quantitative and Mathematical Sciences
NA.

AS.280.347. Health Data Analysis Practicum. 2.0 Credits.
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. Students need to have taken an introductory statistics course at the level of AS.280.345 (Public Health Biostatistics) and must have some experience using the statistical software R to perform basic analyses.
Prerequisites: NA
Corequisites: NA
Instructor(s): L. Jager; M. Taub
Area: Quantitative and Mathematical Sciences
NA.

AS.280.350. Fundamentals of Epidemiology. 4.0 Credits.
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. This course is restricted to Public Health Studies majors only. Any available seats will be open to all majors closer to the start of the fall semester.
Prerequisites: NA
Corequisites: NA
Instructor(s): H. Mckay; M. Schneider
Area: Quantitative and Mathematical Sciences
NA.

AS.280.360. Clinical & Public Health Behavior Change. 3.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): L. Cheskin
Area: Social and Behavioral Sciences
NA.

AS.280.380. Global Health Principles and Practices. 3.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): P. Winch
Area: Social and Behavioral Sciences
NA.
AS.280.399. Community Based Learning - Practicum Community Health Care. 3.0 Credits.
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 Junior Public Health Studies majors only. Others by permission of instructor.
Prerequisites: NA
Corequisites: NA
Instructor(s): J. Goodyear; L. Bone
Area: Social and Behavioral Sciences
NA.

AS.280.427. Communicating Science: Skills to Analyze and Communicate Science News. 3.0 Credits.
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.
Corequisites: NA
Instructor(s): N. Martin
Area: Humanities, Natural Sciences
NA.

AS.280.428. Environmental Health and Disasters. 3.0 Credits.
Environmental Health and Disasters examines the core principles and applications of environmental health science in disaster and humanitarian emergency response. Lecture topics range from emerging infectious diseases to toxicology to climate change. Students will have the opportunity to apply lessons learned through completion of weekly in-class case studies based on recent global events. Juniors/Seniors only
Prerequisites: NA
Corequisites: NA
Instructor(s): J. Freeman
Area: Natural Sciences, Social and Behavioral Sciences
NA.

AS.280.429. An Introduction to Public Health Evaluation Using Population-Based Survey. 3.0 Credits.
Students will be introduced to key concepts for public health program evaluation, including how to develop evaluation research questions, common evaluation study designs, and aspects of study implementation including sample size calculation and questionnaire development. Students will become familiar with how to analyze datasets to answer global health evaluation research questions, and effectively interpret and summarize evaluation study results for key audiences. Students will get hands-on experience working with a Demographic and Health Survey (DHS) dataset to apply skills learned in each module. The DHS program provides indicators in areas of population, health, and nutrition from more than 300 surveys in 90 countries (see www.dhsprogram.com). Juniors/Seniors only
Prerequisites: NA
Corequisites: NA
Instructor(s): E. Carter
Area: Quantitative and Mathematical Sciences, Social and Behavioral Sciences
NA.

AS.280.430. Communicating Public Health Findings Through Research-Based Theatre. 3.0 Credits.
Results of public health research have the potential to catalyze positive social change, yet often need to be creatively communicated to target audiences in order to produce meaningful effects. Research-based theatre is gaining traction in the health and social sciences as a compelling and effective means of disseminating research findings to audiences beyond those that typically read scientific journal articles. Equipped with the results of a recent mixed-methods study of sexual violence on JHU campuses, students will collaboratively prepare a messaging strategy, a research-based script, print/digital materials, and an audience evaluation plan for a live campus dissemination event at the end of the semester.
Prerequisites: NA
Corequisites: NA
Instructor(s): E. Hurley
Area: Humanities, Social and Behavioral Sciences
NA.

AS.280.431. Beyond Borders: Migration, Ethics, and Public Health. 3.0 Credits.
This course explores the public health, ethical, and policy implications of international human migration both globally and within the United States. It is intended for upper-level undergraduate students interested in bioethics, migration, public health, and political philosophy. The first part of the course acquaints students with the various types of migrants and relevant political theory, including citizenship, freedom of movement, open/closed borders, and human rights. In the second part of the course, students discuss different ethical/philosophical concepts related to migration and apply them in analysis of a wide variety of public health and health policy cases. The course culminates with a final paper that students workshop collaboratively. This course challenges students to draw connections between ethical theory and real-world events and policies involving human migration. This is a Gordis Teaching Fellowship course.
Prerequisites: NA
Corequisites: NA
Instructor(s): R. Fabi
Area: Social and Behavioral Sciences
NA.
AS.280.432. Statistical Thinking for Informed Decision Making. 3.0 Credits.
Much of the science that we are exposed to on a daily basis is not through original research articles but through sources such as news reports, articles from content aggregators, and social media postings. While these convenient sources of information can be useful in some respects, it is important to read the original scientific articles on which these reports are based. Only in this way can we better understand the state of science on the issues we care about. In this course, students will primarily learn about statistical concepts within the domains of association studies, causal inference, survey analysis, and survival analysis that provide the background necessary to read a wide variety of primary research in public health. Required readings from a custom course textbook will be supplemented by in-class lecture, discussion, and guided simulation exercises. Simulation exercises will use the Shiny environment in the R programming language which allows for point-and-click style exploration and does not require any coding. All code used to create these simulation activities will be made available so that students familiar with R or who want to learn more have the chance to explore on their own time. Secondary goals of the class include (1) examining the differences between information contained in original research articles and secondary sources and (2) improving written and oral communication about statistical ideas.
Prerequisites: AS.280.345 or EN.553.112 or EN.550.211
Corequisites: NA
Instructor(s): L. Myint
Area: Quantitative and Mathematical Sciences
NA.

AS.280.433. How to Feed the World: Perspectives in Global Food and Nutrition Security. 3.0 Credits.
How do we produce not only enough food, but enough of the right kinds of food, to nourish a growing population? In this course, we define global food security and position it within the landscape of nutritional problems. We then discuss key challenges associated with food production and food distribution including climate change, weak supply chains, and changing dietary patterns. Finally, we learn about current efforts to improve global food security through policies, programs, and new technologies. This course is suitable for students with an interest in food, nutrition, global health, environmental sustainability, and complex systems.
Prerequisites: NA
Corequisites: NA
Instructor(s): M. Spiker
Area: Social and Behavioral Sciences
NA.

AS.280.434. Public Health Nutrition in Latin America. 3.0 Credits.
This course examines drivers and determinants of health in Latin American population from a public health nutrition perspective. Students will be able to discuss the Global Nutrition Transition framework, drawing from historical public health nutrition issues in Latin America to understand current diet-related concerns and patterns. This is a discussion-based course in which students will be constantly reflecting on past and current issues and lessons learned from these countries. By the end of this course, students will be able to propose future public health policies and strategies to improve the nutritional profile of the Latin American population both in Latin American Countries and in Latino immigrant communities here in the United States. Gordis Teaching Fellowship course open to junior and seniors only.
Prerequisites: NA
Corequisites: NA
Instructor(s): A. Trude
Area: Social and Behavioral Sciences
NA.

AS.280.435. Alcohol Use and Social Disparities: A Public Health Perspective. 3.0 Credits.
This upper-level course examines alcohol use from an ethical, epidemiological, and social justice perspective. The course is structured in three parts: 1.) Ethical issues in alcohol-related harms, 2.) Alcohol and marginalized populations, and 3.) Alcohol and injustice. This course models how to frame a complex problem from a public health perspective and teaches students to critically engage with social justice concepts. This seminar-format course incorporates guest lectures, small group exercises, case studies, and role plays. Gordis Teaching Fellowship course open to juniors and seniors.
Prerequisites: NA
Corequisites: NA
Instructor(s): P. Trangenstein
Area: Social and Behavioral Sciences
NA.

AS.280.436. Using Secondary Data to Conduct Public Health Research. 3.0 Credits.
Students will learn how to use administrative claims, electronic health records, and other secondary data sources to conduct public health research. The course will address privacy issues, data cleaning, creation of new variables, missing data, and documentation of data analysis decisions. Students will have the opportunity to apply course concepts to real data sets. This course is intended for undergraduates in their junior or senior year who are interested in conducting public health research with large, secondary data sets. AS.280.345 (Public Health Biostatistics) or other introductory statistics class required. Some familiarity with R is recommended, but not required. This is a Gordis Teaching Fellowship course.
Prerequisites: AS.200.314 OR AS.230.205 OR AS.280.345 OR EN.550.211 OR EN.550.310 OR EN.550.311 OR EN.550.413 OR EN.550.420 OR EN.550.430 OR EN.560.348
Corequisites: NA
Instructor(s): S. Heins
Area: Quantitative and Mathematical Sciences
NA.
AS.280.437. Saving Newborn Lives in Low Resource Settings. 3.0 Credits.
Child mortality has declined precipitously over the past 25 years, but neonatal mortality has remained largely unchanged. Today, around the world, 45 percent of all child mortality occurs in newborns, and these deaths are overwhelmingly in low-income countries. Prematurity, events during childbirth, and infections like pneumonia and sepsis are the largest killers of newborns, and most of these deaths could be prevented with quality care during childbirth. Students will spend the first half of the course learning the direct and indirect causes of perinatal and newborn mortality and interventions that have been proven to prevent perinatal and newborn deaths in low resource settings, such as skilled birth attendance, essential newborn care, helping babies breathe, kangaroo mother care, and treatment of the sick newborn. Students will spend the second half of the course working in teams to critically evaluate newborn health in a chosen country and propose a solution that will reduce perinatal and newborn deaths. Students will have the opportunity to present their final project design to a panel of professionals working in international public health. This class is designed to be highly engaging, so students should come prepared to work in groups, debate ideas, and discuss their points of view. Students will also have the opportunity to learn how to treat a newborn who is not breathing at birth, and simulate kangaroo mother care for thermoregulation. This is a Gordis Teaching Fellowship course.
Prerequisites: (AS.280.225 OR AS.280.380) AND AS.280.350
Corequisites: NA
Instructor(s): A. Bear
Area: Social and Behavioral Sciences
NA.

AS.280.438. Reproductive Health in Crisis: Issues in Meeting the Needs of Vulnerable Populations. 3.0 Credits.
Introduces students to the reproductive health needs of over 65 million people affected by humanitarian, economic, and environmental crises globally. Presents an overview of health care delivery systems in a variety of contexts, and examines the reproductive health consequences of disruptions in service provision during times of crisis. Examines the impact of policies and programs targeting affected groups. Discusses international standards in humanitarian response. Includes discussion of maternal and newborn health, family planning, abortion, and gender based violence. Students develop competency to conduct reproductive health service needs assessments and design an emergency preparedness plan that ensures provision of essential care. For the final project, students apply their skills to plan a response program to meet the reproductive health needs of a specific crisis-affected population. This is a Gordis Teaching Fellowship course.
Prerequisites: NA
Corequisites: NA
Instructor(s): L. Collins
Area: Social and Behavioral Sciences
Writing Intensive.

AS.280.439. Ecological Change and Infectious Disease. 3.0 Credits.
This course will introduce students to key concepts in infectious disease ecology and epidemiology. Students will also learn how key ecological changes are influencing infectious disease dynamics. Ecological changes explored in the course include climate change, water management, deforestation, agriculture, and urbanization. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: AS.280.350 can be taken concurrently; AS.280.335
Corequisites: NA
Instructor(s): A. Lorentz
Area: Natural Sciences
NA.

AS.280.440. Introduction to Harm Reduction: Principles and Examples in Public Health. 3.0 Credits.
Harm reduction is an increasingly popular paradigm in public health research and practice. This course introduces students to the principles of and current research in harm reduction. The class will focus on a) history and principles of harm reduction, and appropriate research methods; b) harm reduction & substance abuse and policy; c) harm reduction & sexual health and sex work; d) ethical considerations in harm reduction. This seminar-format course uses journal clubs, small group discussions, and interactive debates. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: AS.280.345 OR EN.553.112 OR EN.550.112 OR EN.553.211 OR EN.550.211
Corequisites: NA
Instructor(s): C. Tomko
Area: Quantitative and Mathematical Sciences
NA.

AS.280.441. Social Media and Public Health. 3.0 Credits.
This upper-level undergraduate research methods design course explores the growing role of social media in public health research. The course first introduces the current social media landscape, tying in different public health and health communication theories of importance to social media research. This is followed by a discussion of qualitative and quantitative research methods that have been used to conduct social media research, as well as the unique ethical considerations presented by this novel field. The course will then delve into each type of social media platform in depth, discussing how public health research has been conducted and how this ever-changing field continues to move forward. By the end of the course, students will have given explicit consideration to the strengths and challenges posed by conducting social media research in public health, and will be able to apply social media research methods to a public health issue of their interest. Some background in research methods is preferred but not required. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: NA
Corequisites: NA
Instructor(s): Y. Rivera
Area: Social and Behavioral Sciences
NA.
AS.280.442. Genetics and Public Health. 3.0 Credits.
DNA is the code of life and variability in this code can be critical in determining human health outcomes. In a post-genomic era with increasingly advanced genetic tools and data it is critical for future public health professionals to understand the role that genetics plays in disease on the individual and population level. More and more, genetics is instructing public health interventions by informing individuals of their risk of acquiring certain diseases, explaining disease etiology, guiding treatment options in the wake of personalized medicine, and may dictate the future of genetic-based disease treatment in the form of gene therapy. The goal of this semester long course is to expand upon basic genetic concepts and apply them to understanding how variation in the human genome can impact health outcomes and inform treatment. We will look at how genetic diseases are inherited, the various ways in which they can manifest as pathology, and how they are discovered and diagnosed. We will also learn how to interpret genome wide association studies and genetic test results and explore the field of genetic counseling. We will finish by looking at the future of genetic medicine by looking at personalized medicine, gene therapy, and gene drive technologies and the potential ethical implications of these interventions. Prior genetics coursework is useful, but not required. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: AS.020.151 AND AS.020.152
Corequisites: NA
Instructor(s): R. Swift
Area: Natural Sciences
NA.

AS.280.443. Health-Related Stigma: Concepts, Considerations, and Interventions. 3.0 Credits.
Health-related stigma plays an important role in health and social outcomes, however its impact on individuals and populations varies according to context. Through readings, discussions, and assignments, students acquire the framework and skills to conceptualize and assess stigma across a range of health domains. To develop their understanding and analytical approach, students examine examples of HIV/AIDS, smoking, obesity, addiction, and mental health stigma. In each case, students consider key questions including: What are the forms and consequences of stigma? What theories apply? What ethical issues exist? How might interventions minimize or leverage stigma for health promotion? Throughout the semester, students also consider broader questions including: When should interventions target stigma? What are the ethical considerations in health-related stigma research? Is stigma always a threat to health? As the course places a strong emphasis on reading, critiquing, and applying health and social scientific literature, knowledge of or experience with psychology, sociology, ethics, and/or statistics is recommended but not required. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: NA
Corequisites: NA
Instructor(s): K. Heley
Area: Social and Behavioral Sciences
NA.

AS.280.444. Mental Health and the Gut. 3.0 Credits.
Explores the strong, bidirectional communication between the gastrointestinal tract and the brain. Reviews the role of the microbiome in shaping brain health, the link between gastrointestinal symptoms and mental health, and new and seminal research on the brain-gut connection in specific psychiatric disorders, including neurodevelopmental disorders, sleep disorders, depression and anxiety, bipolar disorder, schizophrenia and other psychotic disorders, dementia, and Parkinson’s/other movement disorders. Develops students’ skills in reading and critiquing literature as well as designing and analyzing studies on the microbiome and mental health. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: AS.280.345 OR (EN.553.211 (EN.550.211) OR EN.553.112);Students who have taken AS.280.236 are not permitted to take AS.280.445.
Corequisites: NA
Instructor(s): C. Holingue
Area: Social and Behavioral Sciences
NA.

AS.280.446. Quality of Life: Concepts and Challenges in Assessing Wellbeing. 3.0 Credits.
Quality of life means something different to nearly everyone. While public health and regulatory professionals agree that quality of life matters, developing tools that appropriately conceptualize and evaluate quality of life across varying populations remains a challenge. This course will explore the role of quality of life and other health status and functional outcomes in public health. The course is structured in three segments: 1) Conceptualizing quality of life, 2) Measuring quality of life, 3) Valuing quality of life. The class challenges students to assess the existing landscape in quality of life research and critically evaluate how diverse literature bases (including psychology, medicine, economics, & regulatory science) have influenced public health research, policy, and practice. Students will also gain experience in analyzing and drawing meaningful research and regulatory conclusions from experience data such as patient reported outcomes and patient preference information. This course will be structured as a seminar featuring lectures, in-class journal clubs, guest speakers, and small-group lab activities. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: AS.280.345 OR (EN.553.211 (EN.550.211) OR EN.553.112)
Corequisites: NA
Instructor(s): N. Crossnohere
Area: Social and Behavioral Sciences
NA.
AS.280.447. Ethical Considerations When Working With Marginalized Populations- A Public Health Perspective. 3.0 Credits.
Interested in developing best practices to work with marginalized people in public health? This course is for you! We will use a combination of lectures and discussions to critically analyze public health research methodologies at the intersection of ethics, justice, and human rights when working with marginalized populations. The first part of the course equips students with a shared language to understand how marginalization, justice, and ethics are conceptualized in public health. In the second part of the course, students will delve deeper into various public health research methodologies and apply ethical guidelines to a variety of public health cases in the U.S. and internationally. The course will culminate with students designing case studies to present and provide feedback based on ethical considerations. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: NA
Corequisites: NA
Instructor(s): A. Aqil
Area: Social and Behavioral Sciences
NA.

AS.280.448. Vaccine Development, Epidemiology, and Hesitancy in the Modern World. 3.0 Credits.
Immunization is one of the most cost-effective and successful public health measures available, but loss of public confidence in vaccines has resulted in the resurgence of vaccine-preventable diseases. This course will review the process of vaccine development and students will understand the use and utility of immunizations for disease prevention. Students will gain an in-depth understanding of the vaccines that have been successfully introduced into routine immunization schedules. This course will discuss post-licensure vaccine surveillance as well as current domestic and international policy issues in vaccine development, supply, delivery and utilization. We will also examine the origins of vaccine hesitancy and discuss the impact of “anti-vaxxers” on immunization coverage and the subsequent return of vaccine-preventable diseases. Students will have the opportunity to work in teams to critically evaluate multi-level interventions to target vaccine hesitancy and improve immunization coverage, and propose a recommendation that will reduce the morbidity and mortality of a specified vaccine-preventable disease. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: AS.280.350
Corequisites: NA
Instructor(s): T. Holroyd
Area: Social and Behavioral Sciences
NA.

AS.280.449. Corporate Influence on Public Health. 3.0 Credits.
Corporate practices are an often under-recognized social determinant of health. Corporate-induced disease contributes to morbidity and mortality worldwide, and a better understanding of the mechanisms underlying corporate-induced diseases illuminates pathways by which social and environmental factors influence health. This course will investigate the influence of industry using tobacco, alcohol, sugar-sweetened beverage, food, and pharmaceutical industries as examples, emphasizing ecological models. Students will evaluate the historical and current role of each industry as they effect health outcomes, research, public health policy, and public perceptions and behaviors. Students will use case studies from around the globe that exemplify instances of influence and interference and critically consider the power and activity of multibillion-dollar multinational companies. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: NA
Corequisites: NA
Instructor(s): C. Weiger
Area: Social and Behavioral Sciences
NA.

AS.280.450. The Dreaded R-Word: The Ethics of Rationing and Resource Allocation in Health Care. 3.0 Credits.
Uwe Reinhardt, the renowned Princeton health economist, once labeled rationing as “the dreaded ‘R-word.’” Sarah Palin infamously criticized the Affordable Care Act for, in her view, setting up rationing “death panels.” Many others recoil from the idea of rationing, considering it a “heartless, mechanistic withholding of desirable goods or services by faceless bureaucrats.” In contrast, “resource allocation” does not typically inspire the same response. Why does the idea of rationing in health care generate such a negative emotional response? Is this response justified? Does rationing differ from resource allocation as a means of setting priorities for health care? Who has the authority to set priorities for health care? On what basis should priorities be set? Why must priorities be set at all? This class addresses questions like these and offers a broad introduction to the ethics of priority-setting in health care. The class will devote significant time to understanding both the conceptual and normative foundations of priority-setting as well as specific proposals for how to set priorities. We will explore priority-setting in health care at both the individual and population level through various case studies including organ transplants and flu pandemic preparation. We will discuss priority-setting in the context of public health and universal health coverage and explore the role of global organizations like the World Health Organization and World Bank in setting priorities for health care. We will also consider whether priority-setting is compatible with the pursuit of social justice. Gordis Teaching Fellowship course.
Prerequisites: NA
Corequisites: NA
Instructor(s): M. DiStefano
Area: Social and Behavioral Sciences
NA.
AS.280.451. Born a Girl: Issues in Women's Health From a Life Course Perspective. 3.0 Credits.
The discussion surrounding women's health has often remained limited to understanding women's reproductive health needs. This course seeks to move beyond this topic to explore the key issues affecting women's health, utilizing a life course perspective. This undergraduate course will focus on a select number of themes including: a) understanding the history of women's health; b) sexual and reproductive health; c) maternal health; d) violence against women and girls; e) the needs of younger girls and aging women; and f) how mental health and stigma affect women. The course brings both U.S. and global perspectives to enhance the understanding of how the field of women's health has evolved over time. It will also address some of the challenges public health professionals continue to face in addressing the health and wellbeing of women today. This seminar-style course combines class presentations with journal clubs and small group discussions. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: AS.280.350
Corequisites: NA
Instructor(s): T. Karver
Area: Social and Behavioral Sciences
NA.

AS.280.452. Policy, Politics, and Power in Health Equity. 3.0 Credits.
Health disparities are avoidable, unjust differences in health opportunities and outcomes related to factors such as race and ethnicity, education, class, citizenship, disability, sex and gender identity, and sexual orientation. These disparities reflect the systems that distribute resources, privileges, and power across society and mediate exposure to physical and mental health hazards such as economic deprivation, discrimination, violence, unhealthy environments, uninsurance, and inadequate medical care. Health equity, which is often referred to as social justice in health, is an ethical value that drives efforts to eliminate these disparities. As the National Academy of Medicine asserts in each of its reports, “Knowing is not enough; we must apply. Willing is not enough; we must do.” The purpose of this course is to introduce students to essential concepts, literature, and policy issues related to health disparities and to prepare them to use their knowledge to build effective policy strategies in support of health equity. Gordis Teaching Fellowship course. Completion of AS.280.340/ Fundamental of Health Policy Management is recommended, but not required. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: NA
Corequisites: NA
Instructor(s): K. Baker
Area: Social and Behavioral Sciences
NA.

AS.280.453. Contemporary Social Movements in Public Health. 3.0 Credits.
Health social movements attempt to alter power structures in order to achieve greater health equity, promote access to resources, and change perceptions of disease. But what distinguishes a moment from a movement? Under what conditions can health social movements lead to lasting policy and social change? Together we will explore a range of contemporary health social movements such as Black Lives Matter, #MeToo, gun reform, US healthcare reform, environmental movements, and others. We will analyze the types of goals, resources, and tactics used in these movements and consider their contributions to the shaping of health-related policies and practices. Students will compose a brief and highly polished analysis of a health social movement of their choosing that may be suitable for publication. Gordis Teaching Fellowship course. Priority registration is given to Public Health Studies majors. Other students will be permitted to register as space allows.
Prerequisites: NA
Corequisites: NA
Instructor(s): L. Kroart
Area: Social and Behavioral Sciences
NA.

AS.280.495. Honors In Public Health - Seminar. 3.0 Credits.
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. Classes will be held at Bloomberg School of Public Health.
Prerequisites: NA
Corequisites: NA
Instructor(s): A. Herbert
Area: Social and Behavioral Sciences
Writing Intensive.

AS.280.499. Honors in Public Health. 3.0 Credits.
A research methods seminar to prepare students doing honors in Public Health Studies. Permission Required.
Prerequisites: NA
Corequisites: NA
Instructor(s): A. Herbert; M. Bulzacchelli
Area: Social and Behavioral Sciences
Writing Intensive.

AS.280.500. Applied Experience-Public Health. 1.0 Credit.
Perm. Req’d, Public Health Majors Only. 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. Students completing their AE in the current semester will be enrolled in Section 2. Students whose time will roll over to an additional grading period will be enrolled in Section 1. Please contact your PHS Advisor for complete details.
Prerequisites: You must request Independent Academic Work using the Independent Academic Work form found in Student Self-Service.
Registration > Online Forms.
Corequisites: NA
Instructor(s): K. Frisch
Area: NA
NA.
AS.280.501. Internship-Public Health. 1.0 Credit.
Permission Required. Public Health majors only
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): C. McNamara; K. Frisch; K. Henry; M. Bulzacchelli
Area: NA
NA.

AS.280.502. Internship-Public Health. 1.0 Credit.
Permission Required. S/U only.
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): C. McNamara; K. Henry; M. Bulzacchelli
Area: NA
NA.

AS.280.505. Research in Public Health. 3.0 Credits.
NA
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): C. McNamara; K. Henry; L. Folda; M. Bulzacchelli
Area: NA
NA.

AS.280.506. Research for Freshmen/Sophomores in Public Health. 0.0 - 3.0 Credits.
Permission Required.
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): C. McNamara; K. Henry; M. Bulzacchelli; R. Pearlman
Area: NA
NA.

AS.280.507. Independent Study-Public Health. 3.0 Credits.
Public Health majors only. Permission Required.
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): C. McNamara; K. Frisch; K. Henry; M. Bulzacchelli
Area: NA
NA.

AS.280.508. Independent Study-Public Health. 3.0 Credits.
Consult the public health studies adviser for procedure. Permission
Required.
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): C. McNamara; K. Henry; M. Bulzacchelli
Area: NA
NA.

AS.280.511. Research for Juniors/Seniors in Public Health. 3.0 Credits.
NA
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): C. McNamara; K. Henry; M. Bulzacchelli
Area: NA
NA.

AS.280.512. Research for Juniors/Seniors in Public Health. 0.0 - 3.0 Credits.
Restricted to public health studies majors. Consult the public health
studies adviser for procedure. Permission Required.
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): Staff
Area: NA
NA.

AS.280.590. Internship - Summer. 1.0 Credit.
NA
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): C. McNamara; K. Frisch; K. Henry; M. Bulzacchelli
Area: NA
NA.

AS.280.596. Independent Study-Summer. 3.0 Credits.
NA
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): C. McNamara; K. Frisch; K. Henry; M. Bulzacchelli
Area: NA
NA.

AS.280.597. Research for Freshmen/Sophomores in Public Health. 3.0 Credits.
NA
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): Staff
Area: NA
NA.

AS.280.598. Research for Juniors/Seniors in Public Health. 3.0 Credits.
NA
Prerequisites: You must request Independent Academic Work using
the Independent Academic Work form found in Student Self-Service:
Registration > Online Forms.
Corequisites: NA
Instructor(s): C. McNamara; K. Frisch; K. Henry; M. Bulzacchelli
Area: NA
NA.
Cross Listed Courses

English
AS.060.155. Expository Writing: Introduction to the Research Paper - Controversies in Adolescence. 3.0 Credits.
"Introduction to the Research Paper" is designed to introduce more experienced student writers to the fundamental skills of the research process. These include asking research questions, evaluating the usefulness of sources to answer them, synthesizing sources, reading sources critically, and developing arguments that deliver an original thesis. Students will work with a research librarian at the Eisenhower Library, with whom they will learn to navigate traditional databases as well as new media sources. The Research Paper is topic-based and divided into three linked units of instruction. The course culminates with a paper of 10-12 pages that draws upon the cumulative skills of the semester. Each course is capped at ten students and available only to those who have taken "Expository Writing" (060.113/114)
Prerequisites: AS.060.113 OR AS.060.114
Corequisites: NA
Instructor(s): A. Watters
Area: Humanities
Writing Intensive.

Public Health Studies

AS.140.146. History of Public Health in East Asia. 3.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): M. Hanson
Area: Humanities, Social and Behavioral Sciences
Writing Intensive.

AS.140.156. Harm City? Public Health in Baltimore, 1797 to the present. 3.0 Credits.
Explores the history of public health in urban America using Baltimore as example. Examines topics such as include infectious diseases, mental health, sanitation, rodent control, primary care, substance abuse, and STDs using frameworks of racism, classism, poverty and inequality.
Prerequisites: NA
Corequisites: NA
Instructor(s): G. Mooney
Area: Humanities, Social and Behavioral Sciences
NA.

AS.140.176. Public Health in East Asia Through Films & Documentaries. 1.0 Credit.
This course uses contemporary films and documentaries to address issues in public health in East Asia, past & present. Topics covered include medicine in turn-of-the-twentieth century Japan and China, revolutionary medicine, STDS, mental illness, HIV/AIDS in China, industrial pollution, the politics of universal health care insurance, and pandemics in East Asia.
Prerequisites: NA
Corequisites: NA
Instructor(s): M. Hanson
Area: Humanities, Social and Behavioral Sciences
NA.

AS.140.311. Ecology, Health, and the Environment. 3.0 Credits.
Explores diverse problems linking ecological, environmental and public health themes, with focus on Chesapeake region. Students' research projects can be outside Chesapeake region.
Prerequisites: NA
Corequisites: NA
Instructor(s): S. Kingsland
Area: Humanities, Social and Behavioral Sciences
Writing Intensive.

History

AS.100.411. Readings in the History of Public Health in the 20th and 21st Centuries. 3.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): L. Galambos
Area: Humanities, Social and Behavioral Sciences
Writing Intensive.

History of Science, Medicine, and Technology

AS.140.105. History of Medicine. 3.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): M. Fissell
Area: Humanities, Social and Behavioral Sciences
NA.

AS.140.106. History of Modern Medicine. 3.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): N. Comfort
Area: Humanities, Social and Behavioral Sciences
NA.

AS.140.146. History of Public Health in East Asia. 3.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): M. Hanson
Area: Humanities, Social and Behavioral Sciences
Writing Intensive.

AS.140.156. Harm City? Public Health in Baltimore, 1797 to the present. 3.0 Credits.
Explores the history of public health in urban America using Baltimore as example. Examines topics such as include infectious diseases, mental health, sanitation, rodent control, primary care, substance abuse, and STDs using frameworks of racism, classism, poverty and inequality.
Prerequisites: NA
Corequisites: NA
Instructor(s): G. Mooney
Area: Humanities, Social and Behavioral Sciences
NA.

AS.140.176. Public Health in East Asia Through Films & Documentaries. 1.0 Credit.
This course uses contemporary films and documentaries to address issues in public health in East Asia, past & present. Topics covered include medicine in turn-of-the-twentieth century Japan and China, revolutionary medicine, STDS, mental illness, HIV/AIDS in China, industrial pollution, the politics of universal health care insurance, and pandemics in East Asia.
Prerequisites: NA
Corequisites: NA
Instructor(s): M. Hanson
Area: Humanities, Social and Behavioral Sciences
NA.

AS.140.311. Ecology, Health, and the Environment. 3.0 Credits.
Explores diverse problems linking ecological, environmental and public health themes, with focus on Chesapeake region. Students' research projects can be outside Chesapeake region.
Prerequisites: NA
Corequisites: NA
Instructor(s): S. Kingsland
Area: Humanities, Social and Behavioral Sciences
Writing Intensive.

Philosophy

AS.150.219. Introduction to Bioethics. 3.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): H. Bok
Area: Humanities, Social and Behavioral Sciences
Writing Intensive.
**Economics**

AS.180.252. Economics of Discrimination. 3.0 Credits.
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 labor market outcomes of different groups respond; 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

**Corequisites:** NA

Instructor(s): B. Morgan

Area: Social and Behavioral Sciences

Writing Intensive.

AS.180.289. Economics Of Health. 3.0 Credits.
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

**Corequisites:** NA

Instructor(s): D. Bishai

Area: Social and Behavioral Sciences

NA.

AS.180.390. Health Economics & Developing Countries. 3.0 Credits.
Benefits of good health and its costs. Health demand and supply in poor countries. Welfare economics of Public Health. This is a writing seminar. There are some lectures on how to write a paper and on the substance of the economics of international health but the focus and only assignment is a 40-page paper by each student under the supervision of the instructor.

**Prerequisites:** AS.180.301 or AS.180.401; Students may not take AS.180.390 if they took AS.180.391.

**Corequisites:** NA

Instructor(s): M. Gersovitz

Area: Social and Behavioral Sciences

NA.

**AS.230.150. Issues in International Development. 3.0 Credits.**
Why do billions of people continue to live in poverty? What obstacles stand in the way of secure and dignified lives for all? Who is most likely to bring about change, what strategies should they follow, and what kinds of institutions should they put in place? 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 over the optimal conditions and strategies for generating economic growth and on the relationship between growth, human welfare, and inequality. The second section presents critical assessments of development interventions from various perspectives. The third section considers the role of social movements in shaping development and social change in the 21st century.

**Prerequisites:** NA

**Corequisites:** NA

Instructor(s): R. Agarwala

Area: Social and Behavioral Sciences

NA.

AS.230.154. Freshman Seminar: Gender, Health and Aging. 3.0 Credits.
In this course students will develop an understanding of the ways in which gender structures health and well being through adulthood and later life. The experience of sexual minorities and the intersection of gender with class and ethnicity will also be discussed. Students will be expected to participate actively and lead discussions on specific topics.

**Prerequisites:** NA

**Corequisites:** NA

Instructor(s): E. Agree

Area: Social and Behavioral Sciences

Writing Intensive.

AS.230.320. Education & Inequality: Individual, Contextual, and Policy Perspectives. 3.0 Credits.

**NA**

**Prerequisites:** NA

**Corequisites:** NA

Instructor(s): S. Deluca

Area: Social and Behavioral Sciences

Writing Intensive.

AS.230.324. Gender and International Development. 3.0 Credits.
This course employs a comparative perspective to examine the gendered impact of international development experiences and policies. Students will discuss the historical evolution of how the concept of gender has been constructed, conceptualized, and integrated into international development theory and practice. The course will also examine how greater international development. In particular, we will examine structural theories of poverty reduction, individual theories of power and processes of stratification at the household and family level. Specific issue areas will include the globalization, class and work political participation and social movements. Cross-listed with International Studies (CP IR). Fulfills Economics requirement for IS GSCD track students only.

**Prerequisites:** NA

**Corequisites:** NA

Instructor(s): R. Agarwala

Area: Social and Behavioral Sciences

NA.

**Sociology**

AS.230.252. Economics of Discrimination. 3.0 Credits.
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

**Corequisites:** NA

Instructor(s): B. Morgan

Area: Social and Behavioral Sciences

Writing Intensive.

AS.230.320. Education & Inequality: Individual, Contextual, and Policy Perspectives. 3.0 Credits.

**NA**

**Prerequisites:** NA

**Corequisites:** NA

Instructor(s): E. Agree

Area: Social and Behavioral Sciences

Writing Intensive.

AS.230.150. Issues in International Development. 3.0 Credits.

**Prerequisites:** NA

**Corequisites:** NA

Instructor(s): R. Agarwala

Area: Social and Behavioral Sciences

NA.
AS.230.335. Medical Humanitarianism. 3.0 Credits.
Humanitarian organizations play life-preserving roles in global conflicts, and have front-row views of disasters ranging from the 2010 Haiti earthquake to the 2011 Fukushima tsunami in Japan. Yet even while they provide vital assistance to millions of people in crisis, such organizations are beset by important paradoxes that hinder their capacity to create sustainable interventions. They work to fill long-lasting needs, but are prone to moving quickly from one site to the next in search of the latest emergency. They strive to be apolitical, yet are invariably influenced by the geopolitical agendas of global powers. How do such contradictions arise, and what is their impact upon millions of aid recipients around the world? Drawing on case studies from South Sudan to Haiti, this course addresses these contradictions by exploring how and why medical aid organizations attempt, and sometimes fail, to reconcile short-term goals, such as immediate life-saving, with long-term missions, such as public health programs and conflict resolution initiatives.
Prerequisites: NA
Corequisites: NA
Instructor(s): I. Naveh Benjamin
Area: Social and Behavioral Sciences
Writing Intensive.

AS.230.341. Sociology of Health and Illness. 3.0 Credits.
This course introduces students to core concepts that define the sociological approach to health, illness and health care. Topics include: health disparities, social context of health and illness, and the Sociology of Medicine.
Prerequisites: NA
Corequisites: NA
Instructor(s): E. Agree
Area: Social and Behavioral Sciences
NA.

AS.230.358. The Politics of Mental Health. 3.0 Credits.
This course examines how the psy disciplines — psychology, psychiatry, psychotherapy and related fields — create knowledge about the mind, and how these fields have in turn shaped political and social life since early 20th century. We will explore how the psy disciplines have proven useful to projects of state building by reconstructing the human mind as a calculable, quantifiable entity, one that can be measured and governed across diverse educational, military, and healthcare settings. We will then ask how psychiatric categories such as bipolar disorder and PTSD (post-traumatic stress disorder) were created, and consider their impact on both the legal/medical management of illness and on lay and expert notions of sanity and normality. Finally, we will examine the rising influence of humanitarian mental health interventions, and immerse ourselves in the debates they have engendered concerning the use of psychotherapy to alleviate suffering in war and disaster zones.
Prerequisites: NA
Corequisites: NA
Instructor(s): I. Naveh Benjamin
Area: Social and Behavioral Sciences
Writing Intensive.

AS.230.393. Global Health and Human Rights. 3.0 Credits.
Is access to healthcare a fundamental human right? If so, then which global actors are obligated to provide healthcare to whom, and for how long? How do meanings of health and illness vary across time and place? And finally, how are human rights principles translated into frontline practice in order to promote well-being? This course takes a critical interdisciplinary approach to these questions through a series of global case studies ranging from humanitarian aid in post-tsunami Sri Lanka to anti-FGM (female genital mutilation) campaigns in Ghana. How do international NGOs, UN bodies, and governments collaborate (or compete) to distribute healthcare in places beset by dire resource shortages? Do human rights principles carry legal weight across borders, and if so, could access to healthcare services and essential medicines be litigated in order to compel governments to provide it? And finally, what cultural assumptions do human rights discourses carry with them, and what happens if rights-based approaches are poorly received by recipient populations? Moving beyond the basic principle of healthcare as a human right, this course aims to bring this idea’s history and politics into focus by offering an in-depth exploration of its ethics and implementation.
Prerequisites: NA
Corequisites: NA
Instructor(s): I. Naveh Benjamin
Area: Social and Behavioral Sciences
Writing Intensive.

Earth Planetary Sciences

AS.270.308. Population/Community Ecology. 3.0 Credits.
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. Students who have not taken one of the prerequisites may register with the permission of the instructor.
Prerequisites: AS.270.103 OR AS.020.151
Corequisites: NA
Instructor(s): M. Avolio
Area: Natural Sciences
NA.

AS.271.107. Introduction to Sustainability. 3.0 Credits.
Humans are having such a massive impact on Earth systems that some call this the Anthropocene epoch. Should we consider this state of affairs progress or catastrophe? How to we find a sustainable path to the future? This course provides an interdisciplinary introduction to the principles and practice of sustainability, exploring such issues as population, pollution, energy and natural resources, biodiversity, food, justice, and climate change through the lens of systems thinking. Course open to freshmen, sophomores, and juniors. Seniors by instructor permission only.
Prerequisites: NA
Corequisites: NA
Instructor(s): R. Kelly
Area: NA
NA.
AS.271.360. Climate Change: Science & Policy. 3.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): B. Zaitchik; D. Waugh
Area: Natural Sciences
NA.

Center for Africana Studies
AS.362.371. Public Health Crisis in Africa. 3.0 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.
Prerequisites: NA
Corequisites: NA
Instructor(s): M. Smart
Area: Humanities, Social and Behavioral Sciences
NA.

Environmental Health and Engineering
EN.570.108. Introduction to Environmental Engineering and Design. 4.0 Credits.
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.
Prerequisites: NA
Corequisites: NA
Instructor(s): H. Alavi
Area: Engineering
NA.