GLOBAL HEALTH STUDIES

Program director: Elizabeth Bradley, LEPH 300A, 785-2937; program adviser: Kaveh Khoshnood, LEPH 405, 785-2920; globalhealthstudies@yale.edu; ghi.yale.edu

GLOBAL HEALTH STUDIES ADVISORY COMMITTEE
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Issues related to health are among the most important challenges facing societies, both domestically and globally. Finding solutions to health-related problems requires multidisciplinary comprehension of all dimensions of health, including biological and social determinants, economics and politics of health care systems and health care delivery, and ways in which health is understood by individuals, societies, and cultures.

The Global Health Studies program facilitates global health education for undergraduates at Yale. Although not a major, the program offers courses through an interdisciplinary framework that brings together the natural sciences, the social sciences, and the humanities. Students choose a major in another department or program and expand their discipline with elective courses offered by Global Health Studies. Within their major, students may elect interdisciplinary concentrations and global health tracks to pursue an area of study that crosses conventional disciplinary and departmental boundaries. For details about course work, students should consult the director of undergraduate studies in their major.

Students desiring greater depth in the field are encouraged to apply to be a Global Health Fellow (http://globalhealth.yale.edu/gh-fellows). Global Health Fellows are usually selected in the fall of their sophomore year although, in exceptional cases, juniors may also be accepted. Fellows complete an interdisciplinary course of study that includes required and elective courses and fieldwork (e.g., internships with NGOs, or field-based research either with faculty or independently with faculty guidance). In the summer after the junior year, fellows conduct their own independent global health fieldwork, for which they receive support in the form of course work, designated funding, and mentorship from an assigned global health faculty adviser. During their senior year, fellows are expected to incorporate their global health fieldwork and classroom experiences into their senior requirement and to develop a publication-worthy written product.

To assist students in connecting classroom knowledge and skills with practical work in global health, the Global Health Studies program supports fellowships (http://globalhealth.yale.edu/fellowships) such as the Yale GHI: Field Experience Award, the Yale-Collaborative Action Project (Y-CAP), and the Yale College Fellowship for Research in Health Studies.

Qualified students may take graduate courses at the School of Public Health, subject to restrictions on graduate and professional school enrollment (http://catalog.yale.edu/ycps/academic-regulations/special-arrangements/#coursesintheyalegraduateandprofessionalsschools) described in the Academic Regulations. Further information about these courses and other graduate offerings can be found in the School of Public Health bulletin (http://www.yale.edu/printer/bulletin/htmlfiles/publichealth). For information about the five-year B.A.–B.S./M.P.H. degree program offered jointly with the School of Public Health, see under Public Health (http://catalog.yale.edu/ycps/subjects-of-instruction/public-health).

Global Health Studies Courses

* **HLTH 081a, Current Issues in Medicine and Public Health** Robert Bazell
Analysis of issues in public health and medicine that get extensive media attention and provoke policy debates. Topics include vaccination, the value of cancer screening and genetic testing, determinants of a healthy lifestyle, the U.S. role in global health, and the cost of health care. Enrollment limited to freshmen with a score of 4 or 5 on the Advanced Placement placement examination in Biology or the equivalent. Preregistration required; see under Freshman Seminar Program.

**HLTH 140b / DEVN 197b / SOCY 126b, Health of the Public** Nicholas Christakis
Introduction to the field of public health. The social causes and contexts of illness, death, longevity, and health care in the United States today. How social scientists, biologists, epidemiologists, public health experts, and doctors use theory to understand issues and make causal inferences based on observational or experimental data. Biosocial science and techniques of big data as applied to health. See **SC**

* **HLTH 155a / E&EB 106a / MCDB 106a, Biology of Malaria, Lyme, and Other Vector-Borne Diseases** Alexia Belperron
Introduction to the biology of pathogen transmission from one organism to another by insects; special focus on malaria, dengue, and Lyme disease. Biology of the pathogens including modes of transmission, establishment of infection, and immune responses; the challenges associated with vector control, prevention, development of vaccines, and treatments. Intended for non–science majors; preference to freshmen and sophomores. Prerequisite: high school biology. See **SC**
HLTH 230a, Global Health: Challenges and Responses  Richard Skolnik  
Overview of the determinants of health and how health status is measured, with emphasis on low- and middle-income countries. The burden of disease, including who is most affected by different diseases and risk factors; cost-effective measures for addressing the problem. The health of the poor, equity and inequality, and the relationship between health and development.  WR, SO

HLTH 240b, Epidemiology and Public Health  Marney White  
A general introduction to epidemiology and the field of public health. Methods of epidemiological investigation, research, and practice. Emphasis on study design and the skills necessary for the conduct of mentored field research. Priority to Global Health Fellows.

* HLTH 250a / E&EB 235a, Evolution and Medicine  Stephen Stearns  
Introduction to the ways in which evolutionary science informs medical research and clinical practice. Diseases of civilization and their relation to humans’ evolutionary past; the evolution of human defense mechanisms; antibiotic resistance and virulence in pathogens; cancer as an evolutionary process. Students view course lectures on line; class time focuses on discussion of lecture topics and research papers. Prerequisite: BIOL 101–104.  WR, SC

* HLTH 270a / CHLD 131a / EDST 131a, The Growing Child in Global Context  Erika Christakis  
The effects of poverty, changing demographic and workforce trends, and access to early education and child care on the growing child around the world. Topics include antenatal care, mental and behavioral health, malnutrition and obesity, family support, schooling, sex selection and gender bias, parenting practices, migration and warfare, and child policy challenges in diverse cultural and socioeconomic contexts.  SO

HLTH 280b / HIST 146b / HSHM 212b, Historical Perspectives on Global Health  Joanna Radin  
The broader historical context of contemporary practices, policies, and values associated with the concept of global health. Historical formations around ideas about disease, colonialism, race, gender, science, diplomacy, security, economy, and humanitarianism; ways in which these formations have shaped and been shaped by attempts to negotiate problems of health and well-being that transcend geopolitical borders.  HU

* HLTH 325a / GLBL 189a / LAST 416a, Methods and Ethics in Global Health Research  Leslie Curry  
Introduction to research methods in global health that recognize the influence of political, economic, social, and cultural factors. Quantitative, qualitative, and mixed-method approaches; ethical aspects of conducting research in resource-constrained settings; the process of obtaining human subjects’ approval. Students develop proposals for short-term global health research projects conducted in resource-constrained settings.  SO RP

* HLTH 330b, Case Studies in Global Health  Richard Skolnik  
Exploration of three important themes in the study of global health: efforts to eradicate communicable disease, attempts to reform health systems, and investments to achieve more equity and equality in health services delivery. Case studies examined from historical, economic, technical, epidemiological, political, sociological, and managerial perspectives. Prerequisite: HLTH 230 or equivalent, or with permission of instructor.  WR, SO

* HLTH 350b / HSHM 213b, Global Health and the Law  Paul Turner  
Study of the legal regulations that govern global health. Emphasis on the economic, technical, epidemiological, political, sociological, and managerial perspectives of global health. Prerequisite: HLTH 230 or equivalent, or with permission of instructor.  WR, SO

* HLTH 370b / ER&M 360b / HSHM 422b / SOCY 390b / WGSS 390b, Politics of Reproduction  Rene Almeling  
Reproduction as a process that is simultaneously biological and social, involving male and female bodies, family formation, and powerful social institutions such as medicine, law, and the marketplace. Sociological research on reproductive topics such as pregnancy, birth, abortion, contraception, infertility, reproductive technology, and aging. Core sociological concepts used to examine how the politics of reproduction are shaped by the intersecting inequalities of gender, race, class, and sexuality.  WR, SO

* HLTH 444b, Biology, Pathogenesis, and Natural History of HIV/AIDS  Kristina Talbott-Slagle  
Study of HIV/AIDS from the perspectives of molecular biology, immunology, sociology, history, and epidemiology. Enrollment limited to 18. Prerequisites: BIOL 101, 102, 103, and 104, or with permission of instructor.

* HLTH 480b / E&EB 460b, Studies in Evolutionary Medicine I  Stephen Stearns  
Principles of evolutionary biology applied to issues in medical research and practice. Lactose and alcohol tolerance; the "hygiene hypothesis"; genetic variation in drug response and pathogen resistance; spontaneous abortions, immune genes, and mate choice; the evolution of aging; the ecology and evolution of disease; the emergence of new diseases. Students develop proposals for research to be conducted during the summer. Admission by competitive application; forms are available on the EEB Web site (http://www.eeb.yale.edu).  SC

* HLTH 481a / E&EB 461a, Studies in Evolutionary Medicine II  Paul Turner  
Continuation of E&EB 460. Prerequisite: E&EB 460 or permission of instructor.  SC

* HLTH 490a, Global Health Research Colloquium  Elizabeth Bradley  
This course is designed for Yale College seniors or graduate students who are synthesizing data from global health fieldwork and preparing manuscripts that are suitable for submission to a peer-reviewed journal. Enrollment is limited to 18, and preference will be given to Global Health Fellows. The course meets weekly, but the format of individual course sessions changes as described in detail in the syllabus. Students will receive one-on-one instruction and mentorship from one of the course professors, participate in peer-review in small work groups, give a research-in-progress presentation, and develop a manuscript suitable for publication in a peer-reviewed journal. Priority will be given to Global Health Fellows. Students must have completed global health fieldwork.  RP
Related Courses

* AFST 401a, Research Methods in African Studies  Cheryl Doss
Disciplinary and interdisciplinary research methodologies in African studies, with emphasis on field methods and archival research in the social sciences and humanities. Research methodologies are compared by studying recent works in African studies.

* ANTH 366b / GLBL 393b, Humanitarian Interventions: Ethics, Politics, and Health  Catherine Panter-Brick
Analysis of humanitarian interventions from a variety of social science disciplinary perspectives. Issues related to policy, legal protection, health care, morality, and governance in relation to the moral imperative to save lives in conditions of extreme adversity. Promotion of dialogue between social scientists and humanitarian practitioners.  SO
Anthropology: Sociocultural

* ANTH 451a / WGSS 431a, Intersectionality and Women’s Health  Marcia Inhorn
The intersections of race, class, gender, and other axes of “difference” and their effects on women’s health, primarily in the contemporary United States. Recent feminist approaches to intersectionality and multiplicity of oppressions theory. Ways in which anthropologists studying women’s health issues have contributed to social and feminist theory at the intersections of race, class, and gender.  SO
Anthropology: Sociocultural

* ANTH 455a / WGSS 459a, Masculinity and Men’s Health  Marcia Inhorn
Ethnographic approaches to masculinity and men’s health around the globe. Issues of ethnographic research design and methodology; interdisciplinary theories of masculinity; contributions of men’s health studies from Western and non-Western sites to social theory, ethnographic scholarship, and health policy.  SO RP
Anthropology: Sociocultural

ECON 170a, Health Economics and Public Policy  Howard Forman
Application of economic principles to the study of the U.S. health care system. Emphasis on basic principles about the structure of the U.S. system, current problems, proposed solutions, and the context of health policy making and politics. After introductory microeconomics.  SO

ECON 325a, Economics of Developing Countries  Nancy Qian
Analysis of current problems of developing countries. Emphasis on the role of economic theory in informing public policies to achieve improvements in poverty and inequality, and on empirical analysis to understand markets and responses to poverty. Topics include microfinance, education, health, agriculture, intrahousehold allocations, gender, and corruption. After introductory microeconomics and econometrics.  SO

ECON 327a, The Economics of Poverty Alleviation  Staff
Measures that succeed and fail—and why—in the fight against poverty in developing countries. Fundamentals of behavioral economics and their application to policy and program design. When and how to use experimental methods to evaluate ideas and programs. Interventions and policies that apply to households, small firms, and communities, with particular attention to microfinance, health, and education. After introductory microeconomics and econometrics.  WR, SO

* ECON 461b, Economics, Addiction, and Public Policy  Jody Sindelar
Smoking, alcoholism, illicit drugs, and obesity studied from economic and policy perspectives. Focus on causes of and solutions to problems. After introductory microeconomics.  SO

* ECON 462b / EP&E 228b / GLBL 316b / LAST 410b, The Economics of Human Capital in Latin America  Douglas McKee
Economic issues related to a population’s education, skills, and health; focus on contemporary Latin American societies. Determinants of health and education; evaluation of human capital development policies; the role of human capital in a variety of economic contexts, including the labor market, immigration, child investment, intrahousehold bargaining, inequality, and poverty. Prerequisites: intermediate microeconomics and econometrics.  SO

* ECON 464a / AFST 464a, The Economics of Africa  Cheryl Doss
Study of key microeconomic issues facing African economies and of the economic tools used to analyze such issues. Topics include infrastructure, land, agriculture, conflict, intrahousehold issues, health and education, microfinance and risk, and coping strategies. Readings from recent literature in microeconomic development. Prerequisites: Intermediate microeconomics and econometrics.  SO

ENVE 441a, Biological Processes in Environmental Engineering  Jordan Peccia
Fundamental aspects of microbiology and biochemistry, including stoichiometry, kinetics, and energetics of biochemical reactions, microbial growth, and microbial ecology, as they pertain to biological processes for the transformation of environmental contaminants; principles for analysis and design of aerobic and anaerobic processes, including suspended- and attached-growth systems, for treatment of conventional and hazardous pollutants in municipal and industrial wastewaters and in groundwater. Prerequisites: CHEM 161, 165, or 163, 167 (or CHEM 112, 113, or 114, 115, or 118); MCDB 290 or equivalent; or with permission of instructor.  SC

An examination of the 1994 Rwandan genocide: historical sources of the conflict, the motivations of the killers, actions and reactions of outside actors, efforts to reconstruct a post-genocide society, and continuation of the genocidal dynamic within the Great Lakes region. Consideration of other countries in similar situations, as well as other genocides in recent decades.  SO
EP&E: Social Theory Core
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<th>Course Code</th>
<th>Title</th>
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<tr>
<td>EVST 261a / F&amp;ES 261a / G&amp;G 261a</td>
<td>Minerals and Human Health</td>
<td>Ruth Blake</td>
<td>Study of the interrelationships between Earth materials and processes and personal and public health. The transposition from the environment of the chemical elements essential for life. After one year of college-level chemistry or with permission of instructor; G&amp;G 110 recommended.</td>
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<td>HSHM 435b / HIST 435Jb</td>
<td>The Global Crisis of Malaria</td>
<td>Frank Snowden</td>
<td>The global crisis of malaria examined in comparative and historical context. The mosquito theory of transmission and other developments in scientific understanding of the disease; World Health Organization strategies to eradicate malaria since 1955; the development of tools such as insecticides, medication, and bed nets; the attempt to create an effective vaccine.</td>
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<td>HUMS 076a / HSHM 007a</td>
<td>Epidemics in Global Perspective</td>
<td>William Summers</td>
<td>Interaction of epidemic diseases and society. The response of government, medicine, and the public to the threat or actual presence of widespread contagious diseases. The notion of major epidemics as one of the key contingencies of history, critically examined through contemporary medical, political, and literary accounts. The changing responses of societies and governments to epidemics as well as the reasons for those responses. Enrollment limited to freshmen. Preregistration required; see under Freshman Seminar Program.</td>
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<td>MCDB 050a</td>
<td>Immunology and Microbes</td>
<td>Paula Kavathas</td>
<td>Introduction to the immune system and its interaction with specific microbes. Attention both to microbes that cause illness, such as influenza, HIV, and HPV, and to microbes that live in harmony with humans, collectively called the microbiome. Readings include novels and historical works on diseases such as polio and AIDS. Enrollment limited to freshmen. Preregistration required; see under Freshman Seminar Program.</td>
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<td>MCDB 290b</td>
<td>Microbiology</td>
<td>Christine Jacobs-Wagner</td>
<td>Cell structure of microorganisms, bacterial genetics, microbial evolution and diversity, microbial development, microbial interaction, chemotaxis and motility, gene regulation, microbial genomics, host defense systems, infectious diseases, viruses, and biological weapons. Prerequisites: BIOL 101 and 102, or a term of biochemistry, genetics, cell biology, or molecular biology.</td>
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<td>MENG 491b</td>
<td>Appropriate Technology and the Developing World</td>
<td>Joseph Zinter</td>
<td>Introduction to user-centered design through exploration of appropriate technology, a class of solutions that solve a particular need and are viable and sustainable within the environmental, economic, cultural, and technological infrastructure for which they are intended. Focus on technologies for use in the developing world. Student design teams conceptualize, ideate, prototype, and generate a commercialization plan for a real-world appropriate technological device.</td>
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<td>PLSC 248a</td>
<td>Political Economy of Health Care</td>
<td>Peter Swenson</td>
<td>Political and economic factors that have influenced efforts to achieve quality, economy, and equality in the delivery of American health care since the early twentieth century; some attention to international comparisons. Medical licensing; drug regulation; malpractice law; provider payment and care management; guaranteed health insurance; emergence of the private, employer-based insurance system; recent legislative actions and controversies concerning the quality and cost-effectiveness of health care. Recommended preparation: introductory microeconomics.</td>
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<td>PLSC 257b</td>
<td>Bioethics and Law</td>
<td>Stephen Latham</td>
<td>The treatment by American law of major issues in contemporary biomedical ethics: informed consent, assisted reproduction, abortion, end-of-life care, research on human subjects, stem cell research, and public health law. Readings include legal cases, statutes, and regulations. No background in law assumed.</td>
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<td>PLSC 446b / EP&amp;E 248b / SOCY 360b</td>
<td>Welfare States across Nations</td>
<td>Sigrun Kahl</td>
<td>How different societies counterbalance capitalism and deal with social risks. Welfare state regimes and their approaches to inequality, unemployment, poverty, illness, disability, child rearing, and old age. Why the United States has an exceptionally small welfare state.</td>
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<td>PSYC 355a</td>
<td>Clinical Psychology in the Community</td>
<td>Kristi Lockhart</td>
<td>Mental disorders as they are treated within a community setting. Students participate in a fieldwork placement, working either one-on-one or in groups with the psychiatrically disabled. Seminar meetings focus on such topics as the nature of severe mental disorders, the effects of deinstitutionalization, counseling skills, and social policy issues related to mental health. Prerequisite: PSYC 180 or permission of instructor.</td>
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