

Advising Handbook
Global and Comparative Public Health Concentration

Updated by David Skidmore
September, 2015

Background

Definition and Need

Global public health is a vital and growing field of work and study. The World Health Organization defines public health as: “the science and art of disease prevention, life prolongation and mental and physical health promotion through the joint efforts of the community targeted at clean environment, regulation and control of infectious diseases, education of people to personal hygiene, organizing medical and nursing services focused on early diagnostics and prophylactic treatment of diseases, development of social system enabling every individual adequate life standard to provide health and organization of these possibilities for every citizen within his own right to health and longevity.”

The growing priority given to global public health by public and private agencies requires an expanding commitment on the part of institutions of higher education to prepare current and future students to work in these fields. The concentration in Global and Comparative Public Health addresses this need on the Drake campus by providing students interested in health care professions with a global perspective on their preferred field of study.

Global and Comparative Public Health Concentration

A concentration in Global and Comparative Public Health (GCPH) prepares students to be active participants in improving the health of their own and other communities worldwide. Students will gain an understanding of the determinants of the health of populations; the available options to improve the health of populations; and the evidence demonstrating the efficacy of these options.

Through the GCPH concentration, students will learn to:

- 1 Identify the determinants of health. These determinants will include but are not limited to biological, environmental, economic, political, institutional and social factors;
- 2 Describe the various public health interventions that may influence the health of populations and differentiate between them;
- 3 Explain how the health status of a given population is interdependent with the health of all populations globally;
- 4 Explain and give examples of how culture relates to health and apply this knowledge to conversations about health in different settings;
- 5 Explain how the indicators of health of a given population may be assessed;
- 6 Analyze the relationship between health and social justice;
- 7 Describe the factors (social and cultural) that affect the relevant behaviors of a

- population;
- 8 Devise the questions that may be asked to examine the health of a population;
 - 9 Apply evidence-based thinking to population health concerns.

The GCPH concentration complements various majors, including Biology, BCMB, Pharmacy, Health Sciences, International Relations, Politics, Law, Politics and Society, Sociology, Environmental Science and Policy and Philosophy. Students who complete the program will be well prepared for graduate study and/or careers in fields related to public health.

Requirements for the Concentration:

A total of 21 credits are required, distributed as follows (see course catalogue to identify any prerequisites for listed courses):

Required courses (9 credits):

Hsci 144 Introduction to Public Health
Pols 127 Global Health
Hsci 143 Epidemiology

Electives (12 credits): Take at least one from Natural Sciences list and one from Social Sciences/Humanities list:

Natural Sciences:

Bio 021 Biological Basis of Disease
Bio 092 Introduction to Ethnobotany
Bio 111 Evolved Foodways
Bio 108 Infectious Diseases
Bio 182 Immunology
Chem 012 Food and Health

Social Sciences and Humanities:

Hist 194 Public Health History
Hsci 142 Community Health Education (2 credits)
Hsci 153 Health and Development
Phil 124 Health and Social Justice
Phil 151 Environmental Justice
Pols 169 Critical Perspectives on Public Health Policy
SCSS 071 Environmentalism in the United States
SCSS 076 Inequality and Public Health
SCSA 138 Global Reproductive Politics
SCSS 145 Food and Society
WLC 148 Intercultural Communication

Experiential Learning (Local or international) May count as an elective under either Natural Sciences or Social Sciences/Humanities, depending upon content.

With the exception of the pre-approved experiences listed below, the following

guidelines apply: 1. Experiences that do not receive academic credit cannot be counted. 2. Academic credit must be arranged beforehand either through Drake (e.g., an internship or independent study arranged through a college, school or department and supervised by an instructor) or through a study abroad provider, 3. The student requesting that a credited experience be counted toward GCPH elective requirements must present the GCPH Director with a description of the experience, a brief written justification explaining why the student believes that the experience meet the learning objectives of the GCPH program and a letter of support from either the student's academic adviser or the instructor who will supervise the experience. These materials must be submitted prior to the experience. The GCPH Director will make the final determination of whether the experience qualifies for GCPH elective credit. 4. Experiential credit may replace one elective course, but not more than one.

The following courses - open to Pharmacy students only - are pre-approved for 3 credits under experiential learning for GCPH elective credit under Natural Science:

Phar 285 Hillside Clinic - Belize
Phar 285 Pravara Institute of Medical Sciences - India
Phar 285 University of KwaZulu-Natal - South Africa

Students may declare the concentration by filling out a form through your college administrative office. Inquires should be directed to Professor [David Skidmore](#), Director, The Principal Financial Group Center for Global Citizenship.

Drake University is a member of the [Heartland Global Health Consortium](#).

Administration and Funding

The Center for Global Citizenship (CGC) serves as the administrative home for the concentration. The Director of the Principal Financial Group Center for Global Citizenship also serves as Director of GCPH. The members of the GCPH Steering Committee include those faculty members who teach courses listed under the concentration, plus one Associate Dean each from Arts and Sciences and Pharmacy. The GCPH Steering Committee will meet once per year and will elect an Executive Committee that will be responsible for making policy decisions in coordination with the Director. The Executive Committee will consist of the Director, two Steering Committee members each from the College of Arts and Sciences and the College of Pharmacy and Health Sciences, and one Associate Dean from each college. Faculty representatives to the Executive Committee will be elected by vote of Steering Committee members from the relevant college. Faculty representatives will serve three year terms.

Director's responsibilities:

- Convene meetings of the Steering Committee and the Executive Committee.
- Work with instructors, departments and colleges to coordinate course scheduling and staffing.
- Maintain catalogue and web presence.
- Maintain GCPH Advising Handbook.
- Coordinate and fund co-curricular activities through CGC.

- Represent Drake and GCPH on Heartland Global Health Consortium.
- Communicate with Steering Committee and Executive Committee members and students about relevant activities and events.
- Support relevant faculty development needs through CGC.
- Shepherd Executive Committee-approved curriculum revisions through UCC approval process (including consultation with appropriate Deans).

Steering Committee Member Responsibilities:

- Attend Annual Steering Committee meeting
- Elect representatives to the Executive Committee..
- Keep Director informed about changes in teaching responsibilities that impact upon GCPH concentration.

Executive Committee Member Responsibilities:

- Determine curricular requirements.
- Consider new course submissions for approval.
- Represent GCPH concentration to students, faculty and staff in relevant programs.
- Advise GCPH students (e.g., students in your major who add GCPH).
- Keep Director apprised of relevant information and activities.

Dean's Responsibilities (College of Arts and Sciences and College of Pharmacy and Health Sciences)

- _ Meet as requested with the Director of the GCPH concentration
- _ Support the involvement of Associate Dean and GCPH faculty in Steering Committee
- _ Maintain commitment to support GCPH by providing administrative and instructional support until such time as an administrative or academic program review demonstrates the need for programmatic suspension or deletion.

Advising

Students may register for the concentration through their principal school or college. Advising related to the concentration will, in most cases, be carried out by a student's principal academic adviser. With the consent of the faculty member, students may request a separate adviser who serves on the GCPH Steering Committee.

Graduate Programs in Global Public Health or Similar Field

[University of Iowa, Master of Public Health](#)

[University of Pittsburgh, Certificate of Public Health](#)

[New York University, Program in Global Public Health](#)

[Harvard University, Master of Public Health](#)

[University of North Carolina, Certificate in Global Health](#)

George Washington University, Master of Public Health and Graduate Certificate of Global Health

Johns Hopkins University, Degree Programs in International Health

Des Moines University, Global Health Program

University of Utah, Global Health Initiative

Experiential Learning and Internship Opportunities

Des Moines and Iowa

[World Food Prize: George Washington Carver Internship.](#)

Unpaid, but can be credit. 12-15 hrs/week.

La Clinica de la Esperanza. <https://www.unitypoint.org/desmoines/la-clinica.aspx>

Iowa Department of Public Health - Office of Multicultural Health (minority health program and refugee health program). https://www.idph.state.ia.us/hpcdp/mh_internship.asp

Polk County Health Department.

Working with the minority population in immunization clinic for green card applicants, etc. <https://www.polkcountyiowa.gov/health>

United States (outside of Iowa)

World Food Programme. <https://www.wfp.org/careers/internships>

National Institutes of Health. Summer Internship Program in Biomedical Research.

Paid (>\$2,000 per month stipend). For all levels. Internship includes some research as well as lectures. <https://www.training.nih.gov/programs/sip>

Centers for Disease Control. Student Educational Employment Programs:

Student Careers Employment Program-at least 640 work hours that may lead to CDC job in a field related to academic study. http://www.cdc.gov/employment/menu_student.html

And <http://www.cdc.gov/features/StudentOpportunities/>

The Washington Center for Internships and Academic Seminars.

Program similar to study abroad, but in the US. Take classes and have a placement in an agency in Washington D.C. You pay tuition (around \$10,000 for program and housing fees) and take classes while completing the internship. <http://www.twc.edu/internships>

International

Internships:

International Fund for Agricultural Development.

Paid 6 month internships (\$600/month) in Rome.

<http://www.ifad.org/job/intern/index.htm>

United Nations Environmental Programme.

Paid 3-6 month internships. Variety of areas.

http://www.unep.org/vacancies/default.asp?vac_level=Interns

Study Abroad Options: (consult with Jen Hogan jen.hogan@drake.edu)

Drake

Drake summer study abroad course on sustainable development; Uganda:

<http://www.drake.edu/cbpa/centers/events/summerstudyabroadinuganda/>

SIT Programs

Brazil-Public Health and Community Welfare

Kenya-Development, Health and Society

Mali-Gender, Health and Development

South Africa-Community Health

Switzerland-Development Studies and Public Health

CIEE Programs

“Study Argentina” Public Health

IES Programs

Santiago (Chile) Health Studies Summer Program

Career and Graduate School Resources

Web sites on careers in global public health:

[Masters of Jurisprudence in Health Law](#) (Drake University Law School)

[Certificate in Health Law](#) (Drake University Law School)

[Pharm.D./Masters in Public Health](#) (Drake University and Des Moines University)

[Careers in Public Health](#)

[Graduate Programs in Public Health](#)

[Masters in Public Health](#)

[Ph.D. Programs in Public Health](#)

[Resources in Public Health](#)

[International Volunteer Opportunities](#)

[Public Health Online](#)

[PublicHealth.org](#)

[Ranking of public health programs](#)

[World Health Organization](#)

[Global Health Council Job Board](#)
[Center for Disease Control Jobs](#)
[Association of Schools and Programs of Public Health](#)
[Public Health Jobs and Careers](#)
[Explore Health Careers](#)

Career Categories:

Health Policy and Management

- Academic Policy Advisor
- Legislative Policy Advisor
- Management Policy Advisor
- Hospital/Managed Care Administrator, *Health Facilities*
- Program Evaluation & Planning, *State Health Dept.*
- Information Systems Manager, *Industry/Corporate*
- Health Services Research Analyst, *University*
- Policy Analyst, *Federal Government*

Epidemiology

- State Epidemiologist
- Research Epidemiologist
- Pharmacoepidemiologist
- Director of Infectious/Chronic Diseases, *Local/State Health Dept.*
- Outcomes Researcher, *Industry/Corporate*
- CDC Investigator, *Federal Government*

Biostatistics

- Data Management Director, *State Health Dept.*
- Director of Clinical Trials, *Industry/Corporate*
- Program Evaluation Analyst, *Federal Government*

Behavioral Science and Health Education

- Behavior Scientist
- Health Educator
- Mental Health Researcher
- Consumer Information Director, *Voluntary Health Agencies*
- Program Planning & Evaluation, *Local Health Dept.*
- Health Promotion Specialist, *Industry/Corporate*

Health Communications

- Communications Specialist
- Journalist

Environmental Health Sciences

- State Environmentalist
- Federal Environmentalist
- Waste Management Specialist, *Local Health Department/Environmental Agency*
- Pollution Control Program Director, *State Health Department/Environmental Agency*
- Industrial Hygienist, *Industry/Corporate*
- EPA Researcher/Administrator, *Federal Government*

International and Global Health

- Reproductive Health Specialist
- International HIV Specialist
- Tropical Disease Specialist

Public Health Preparedness and Function

- State Epidemiologist
- Laboratory Director
- Public Health Lawyer

Family Health

- Local Health Officer
- Nurse Educator
- Nutritionist

Note: Substantial portions of this handbook were developed by the following students in spring, 2008 as part of their Global Ambassador senior capstone: Christen Bain, Christopher Bettis, Meghan Flemming, Kelsey McGarvey and Cammeo Medici.

Bibliography of Resources

Overviews/Introductory Books

Global Health in the 21st Century: The Globalization of Disease and Wellness
By Debra DeLaet and David DeLaet

In this book, a scholar/physician team authors a comprehensive introduction to global health issues and emphasizes the potential of public health intervention to improve the longevity and

quality of human life across the globe. The book focuses on public health issues in developing areas as well as challenges affecting medically underserved populations in developed countries. Integrating themes of interconnectedness and globalization throughout, this book encourages readers to consider the role that they might play as engaged citizens in taking on the global public health challenges of the twenty-first century, including everything from AIDs and flu to tobacco, obesity, and threats in conflict zones.

Essentials of Global Health

by Richard Skolnik (Author)
(Amazon)

...Richard Skolnik's *Essentials of Global Health* is so comprehensive that it will be key reading in international health. In accessible language, he explains why good health is crucial to economic development, what indicators help track changes in global health, and requirements for good health systems. Approaches to solving world health problems must be underpinned by good ethics and human rights guidelines, he says, and local practices and cultures must not be ignored. Skolnik looks in detail at children's and women's health, and at the different challenges of tackling communicative and non-communicative disease in developing countries. He also maps out the key players in global health and looks ahead to future challenges. ---*The Lancet*, Vol.370, October 27, 2007

Introduction to Global Health (Paperback)

by Kathryn H. Jacobsen (Author)
(Amazon)

With a unique emphasis on possible solutions to world health problems, this book addresses all the key issues of global health at a level that is basic enough so that students from a variety of majors can understand the material. It will give the reader: An understanding of biological and social aspects of major global health issues, especially in the areas of infectious disease, nutrition, and environmental health. A knowledge of population groups that are at increased risk of poor health and familiarity with policies and programs designed to reduce health inequalities. A familiarity with global health vocabulary, the basic methods used to assess global health, and the tools to locate and understand additional global health information. The author has included over 170 tables and figures to illustrate important concepts, as well as a supplemental chapter on how to read journal articles. The text is also accompanied by downloadable instructor resources, including PowerPoint slides, a TestBank, and an Instructors Manual with suggested discussion questions and sample syllabi.

Global Public Health: A New Era

by Robert Beaglehole (Editor), Robert Beaglehole (Editor)
(B&N)

Global Public Health: A New Era addresses three major issues: the changing global context for public health; the state of public health practice in developed and developing countries; and strategies for strengthening the practice of public health in the twenty first century. This book is in three parts. The first part has two aims. Firstly, it surveys the complex old and new challenges facing public health practitioners. Secondly, it summarizes the state of

health globally using new data based on measures developed by the World Health Organization and other groups to better describe population health status and trends.

Part two presents the first detailed review of the global state of public health. It analyses the public health situation in all regions of the world. Six chapters cover Europe, North and Latin America, and Australia and New Zealand. Three chapters cover China, Sub-Saharan Africa, and South Asia.

The lessons from these chapters are surprisingly similar: the challenges are great; the public health workforce and infrastructure have long been neglected; and much needs to be done to reinvigorate the practice of public health.

The third section covers several cross cutting themes: the impact of the new public health threat from bioterrorism and its implications for the future of public practice; the developing field of international public health ethics; and the central and neglected role of the public in strengthening the practice of public health. The final chapter summarizes the major themes of the book and explores the opportunities for building the capacity of the public health workforce to respond to the major global health needs. Despite the enormity of the challenges facing public health practitioners, especially in developing countries, the tone adopted in the final section of this book is relatively optimistic.

Critical Issues in Global Health

by C. Everett, MD Koop (Editor), Clarence E. Pearson (Editor), M. Roy Schwarz (Editor)
(Amazon)

In *Critical Issues in Global Health*, Koop, Pearson, and Schwarz have assembled contributions by prestigious leaders in the area of public health who here share their insights into what they see as the most pressing issues in global health. The editors have grouped the essays into three main parts, covering countries, continents, and the world; organizational landscapes in global health; and organizations, management, leadership, and partnerships. The relatively short chapters address past successes, current challenges, and possible future advances in public health.

Public Policy

Biosecurity in the Global Age: Biological Weapons, Public Health, and the Rule of Law

by David Fidler (Author), Lawrence Gostin (Author)
(Amazon)

“Fidler and Gostin have produced the best description yet of the traditional as well as the newly emerging laws, regulations, treaties and policies in international biosecurity. They navigate through a broad range of topics, while lucidly explaining the public health issues of the new biosecurity age.”—Victoria Sutton, Professor and Director of the Center for Biodefense, Law and Public Policy, Texas Tech University, and author of *Law and Bioterrorism*

International Public Health: Diseases, Programs, Systems and Policies

by Michael H. Merson (Editor), Robert E. Black (Editor), Anne J., Ph.D. Mills (Editor)
(Amazon)

Now there is a book that reflects both the scope and depth of challenges in global health and the dynamic nature of the field. By emphasizing diseases, programs, health systems, and health policies, *International Public Health* helps readers understand the wide range of global public health issues and the various approaches nations adopt to deal with them. *International Public Health* explores the public health problems facing low- and middle-income countries today, and identifies the three greatest challenges: reproductive health, infectious disease, and nutrition. Containing case studies throughout, and discussion questions at the end of each chapter, this book discusses emerging health systems--their regulation, financing, and management. Illustrates the importance of health on the economic development of a nation, and the reciprocal impact of development on health

A Textbook of World Health: A Practical Guide to Global Health Care
by Russell F. Whaley (Author), T. J. Hashim (Author)
(Amazon)

Textbook for public health students. Stresses three main themes in world health: the provision of primary care; the decentralization of health financing and care; health of migratory people. DNLN: World Health.

Betrayal of Trust: The Collapse of Global Public Health
By Laurie Garrett
(Publishers Weekly)

On a par with Rachel Carson's *Silent Spring*, this chilling exploration of the decline of public health should be taken seriously by leaders and policymakers around the world. Garrett, a Pulitzer Prize-winning journalist for *Newsday* (*The Coming Plague: Newly Emerging Diseases in a World Out of Balance*), has written an accessible and prodigiously researched analysis of disaster in the making in a world with no functioning public health infrastructure. In India in 1994, neglect of public health for the poor led to an outbreak of pneumonic plague; the once-dreaded disease is now easily treatable with antibiotics, but the failure of Indian authorities to quickly reach a diagnosis and provide accurate information resulted in a worldwide panic. The former Soviet Union, for all its flaws, according to Garrett, assured every citizen access to health care. After the U.S.S.R.'s breakup, the Russian economy collapsed. With no funding left for health care, Russia was overwhelmed by a tuberculosis epidemic. Even the U.S., historically a pioneer in public health (this commitment was demonstrated by New York City's quick and successful response to an 1888 cholera epidemic, as well as the tenement reform movement of the early 1900s that helped eliminate diphtheria), is lagging today. During the Reagan administration, Garrett says, budget cuts dramatically weakened public health while also denying poor Americans access to medical care. The author believes that the medical challenges posed by the epidemic spread of AIDS in Africa, by drug-resistant microbes carried from one country to another and by the danger of biological warfare can be met only by a cooperative global movement dedicated to strengthening public health infrastructures. Garrett sounds the alarm with an articulate and carefully reasoned account.

Disease/Emergent Diseases

Infections and Inequalities: The Modern Plagues

by Paul Farmer

(B&N)

Paul Farmer has battled AIDS in rural Haiti and deadly strains of drug-resistant tuberculosis in the slums of Peru. A physician-anthropologist with more than fifteen years in the field, Farmer writes from the front lines of the war against these modern plagues and shows why, even more than those of history, they target the poor. This "peculiarly modern inequality" that permeates AIDS, TB, malaria, and typhoid in the modern world, and that feeds emerging (or re-emerging) infectious diseases such as Ebola and cholera, is laid bare in Farmer's harrowing stories of sickness and suffering.

Challenging the accepted methodologies of epidemiology and international health, he points out that most current explanatory strategies, from "cost-effectiveness" to patient "noncompliance," inevitably lead to blaming the victims. In reality, larger forces, global as well as local, determine why some people are sick and others are shielded from risk. Yet this moving account is far from a hopeless inventory of insoluble problems. Farmer writes of what can be done in the face of seemingly overwhelming odds, by physicians determined to treat those in need. *Infections and Inequalities* weds meticulous scholarship with a passion for solutions--remedies for the plagues of the poor and the social maladies that have sustained them.

Millions Saved: Proven Successes In Global Health

by Ruth Levine (Author), Molly Kinder (Author)

(Amazon)

Seventeen stories about how efforts to improve health in developing countries saved millions of lives -- and millions of dollars. From polio in Latin America, to measles in southern Africa, to HIV in Thailand, these inspiring case studies show what it takes for global health programs to succeed.

Bird Flu: A Virus of Our Own Hatching

by Michael Greger (Author)

From age-old scourges such as smallpox and tuberculosis to emerging threats like AIDS and SARS, our interactions with animals have always played a pivotal role as a source of human disease. Bird flu is the latest such menace coming home to roost. Leading public health authorities now predict as inevitable a pandemic of influenza, triggered by bird flu and expected to lead to millions of deaths around the globe.

The influenza virus has existed for millions of years as an innocuous intestinal virus of wild ducks. What turned a harmless waterborne duck virus into a killer? In *Bird Flu*, Dr. Michael Greger traces the human role in the evolution of this virus, whose humble beginnings belie its transformation into a killer mutant strain with the potential to become as ferocious as Ebola and as contagious as the common cold. In the face of the coming pandemic, Dr. Greger reveals what we can do to protect our families and what human society can do to reduce the likelihood of such catastrophes in the future.

Amid the growing panic surrounding this issue, Dr. Greger takes a sobering look at a deadly cycle and offers a solution to ending it.

Disease and Democracy: The Industrialized World Faces AIDS

by Peter Baldwin (Author)

Disease and Democracy is the first comparative analysis of how Western democratic nations have coped with AIDS. Peter Baldwin's exploration of divergent approaches to the epidemic in the United States and several European nations is a springboard for a wide-ranging and sophisticated historical analysis of public health practices and policies. In addition to his comprehensive presentation of information on approaches to AIDS, Baldwin's authoritative book provides a new perspective on our most enduring political dilemma: how to reconcile individual liberty with the safety of the community.

Baldwin finds that Western democratic nations have adopted much more varied approaches to AIDS than is commonly recognized. He situates the range of responses to AIDS within the span of past attempts to control contagious disease and discovers the crucial role that history has played in developing these various approaches. Baldwin finds that the various tactics adopted to fight AIDS have sprung largely from those adopted against the classic epidemic diseases of the nineteenth century--especially cholera--and that they reflect the long institutional memories embodied in public health institutions.

The Coming Plague: Newly Emerging Diseases in a World out of Balance

By Laurie Garrett
(Amazon)

Where's your next disease coming from? From anywhere in the world--from overflowing sewage in Cairo, from a war zone in Rwanda, from an energy-efficient office building in California, from a pig farm in China or North Carolina. "Preparedness demands understanding," writes Pulitzer-winning journalist Laurie Garrett, and in this precursor to [*Betrayal of Trust: The Collapse of Global Public Health*](#), she shows a clear understanding of the patterns lying beneath the new diseases in the headlines (AIDS, Lyme) and the old ones resurgent (tuberculosis, cholera). As the human population explodes, ecologies collapse and simplify, and disease organisms move into the gaps. As globalization continues, diseases can move from one country to another as fast as an airplane can fly. While the human race battles itself ... the advantage moves to the microbes' court. They are our predators and they will be victorious if we, Homo sapiens, do not learn how to live in a rational global village that affords the microbes few opportunities. Her picture is not entirely bleak. Epidemics grow when a disease outbreak is amplified--by contaminated water supplies, by shared needles, by recirculated air, by prostitution. And controlling the amplifiers of disease is within our power; it's a matter of money, people, and will.

Environment

Environmental Health

by Monroe T. T. Morgan, Joe E. Beck (Contribution by), Darryl B. Barnett (Contribution by)
(B&N)

The third edition of this text features increased global coverage, an updated appendix of environmental organizations, new chapter key terms, and new information on national and international environmental politics, space as an environment, home safety devices, and nuclear

energy. Focus is on the human population and the need to control factors that are harmful to human life rather than on just the environmental sciences. The text is useful for students and professionals in community health education, public health, nursing, engineering, medicine, and the environment. Morgan is affiliated with East Tennessee State University. Annotation c. Book News, Inc., Portland, OR

Ecosystem Change and Public Health: A Global Perspective

by Joan L. L. Aron, Jonathan A. Patz, Jonathan A. Patz (Editor)
(B&N)

The purpose of this textbook on global ecosystem change and human health is twofold: (1) to raise awareness of changes in human health related to global ecosystem change and (2) to expand the scope of the traditional curriculum in environmental health to include the interactions of major environmental forces and public health on a global scale."—from the Introduction
Ecosystem Change and Public Health focuses on how human health is affected by global ecosystem changes. It is the first textbook devoted to this emerging field, offering a global perspective on research methods and emphasizing empirical investigations of health outcomes in combination with integrated assessment for policy development. The book covers such topics as global climate change, stratospheric ozone depletion, water resources management, and ecology and infectious disease. Case studies of cholera, malaria, the effects of water resources, and global climate change and air pollution illustrate the analysis and methodology. The book also includes a resource center describing places to start searches on the World Wide Web, guidelines for finding and evaluating information, suggested study projects, and strategies for encouraging communication among course participants.

Essentials of Environmental Health

by Robert H., Ph.D. Friis (Author)
(Amazon)

Environmental threats are occurring on a worldwide scale. Dramatic pictures of the devastating effects of natural disasters lead the nightly news. Stories of chemical spills and contaminated groundwater, deforestation and suburban sprawl, depleted fisheries and exploding human population, litter the pages of the newspapers daily. National and international policymakers are concerned about the potential impact on the health of the world's population and on the global environment and, as a result, much progress has been made in informing the public and introducing regulations for the control of these hazards. As the first in the Essential Public Health series, *Essentials of Environmental Health* is a clear and comprehensive study of the major topics of environmental health including: Background of the field and "tools of the trade" (environmental epidemiology, environmental toxicology, and environmental policy and regulation). Environmental diseases (microbial agents, ionizing and non-ionizing radiation). Applications and domains of environmental health (water and air quality, food safety, waste disposal, and occupational health). In a straightforward, non-technical approach, the author has included many examples and illustrations of environmental health issues. Perfect for the beginning student as well as the experienced health professional, each chapter concludes with study questions and exercises to engage the reader in further study.

Ethics

Global Prescriptions: Gendering Health and Human Rights

by Rosalind Pollack Petchesky

(B&N)

Global Prescriptions is a critical yet optimistic analysis of the role of transnational women's groups in setting the agendas for women's health in international and national settings. The book reviews a decade of women's participation in UN conferences, transnational networks, national advocacy efforts and sexual and reproductive health provision, assessing both their strengths and weaknesses. It critiques the Cairo, Beijing and Copenhagen conference documents and World Bank, WHO and health sector reform policies. It also offers case studies of national-level reform and advocacy efforts and appraises the controversy concerning TRIPS, trade, and essential AIDS drugs. The author takes into account the formidable political and ideological forces confronting global justice movements and also offers a sobering reassessment of transnational women's NGOs themselves and such problems as 'NGOization', fragmentation and donor-dependency. Petchesky argues that the power of women's transnational coalitions is only as great as their organic connection with grassroots social movements.

Global Pharmaceuticals: Ethics, Markets, Practices

by Adriana Petryna (Editor), Andrew Lakoff, Arthur Kleinman (Editor)

(B&N)

Petryna (anthropology, The New Sch.), Andrew Lakoff (sociology & science studies, Univ. of California, San Diego), and Arthur Kleinman (medical anthropology & psychiatry, Harvard) have edited a collection of nine essays that grew out of the 2002 W.H.R. Rivers Distinguished Lectures in Social Medicine at Harvard University. Most of the writers are medical anthropologists, and their subjects deal with various aspects of "the human consequences of pharmaceutical use and their market expansions in cross-cultural and everyday contexts." Essays offer the results of original research as they discuss the global search for human research subjects, the creation of markets to match existing drugs, company/practitioner ties in Argentina, narcotic dependency treatment in France, how the poor access healthcare in urban India, and government policy in providing AIDS antiretroviral treatment in Brazil and Uganda. The editors hope to spur further research into the issues raised, and although their anthology offers a broader view than found in Marcia Angell's *The Truth About the Drug Companies*, with its clearly academic style, it is not aimed at the same general readership. Recommended for academic and large public libraries.-Dick Maxwell, Porter Adventist Hosp. Lib., Denver Copyright 2006 Reed Business Information.

Community Health in the 21st Century

by Patricia A. Reagan, Jodi Brookins-Fisher, Jodi Brookins-Fisher

(B&N)

Community Health in the 21st Century introduces readers to their roles and responsibilities as members of a global community addressing shared health concerns. This book is the first of its kind to thoroughly explore social, political, economic, and ethical issues associated with community health from a global perspective. The book emphasizes the impact

these perspectives have on possible solutions to important health concerns. It addresses environmental issues, school health programs, and unique concerns of community populations such as ethnically diverse people, people of color, the differently abled, older Americans, children, migrants and farm workers, gay men, lesbians, and women. The book acquaints the reader with the roles and responsibilities of community/public health educators, the leading causes of morbidity and mortality in the United States, Healthy People 2010 emphasis areas, and target populations affected by issues of the 21st century. For college instructors and students.

Global Inequality and Human Needs: Health and Illness in an Increasingly Unequal World

by Laurie A. Wermuth

(B&N)

This book uses a critical theoretical perspective to explore the links between social variables like race, class, and gender, and the health of populations around the world. *Global Inequality and Human Needs* includes case studies from various countries (Russia, Chile, India, Sub-Saharan Africa) as well as the U.S. show the impact of policy on social inequality and health. Sociologists, public health professionals and anyone interested in international health issues.

Understanding the Global Dimensions of Health

by S. William A. William Gunn, P.B. Mansourian, P. B. Mansourian (Editor), Anthony Piel

(Editor)

(B&N)

Health care is a basic human right. But as our planet grows smaller, the number of people without even minimal care continues to rise. *Understanding the Global Dimensions of Health* brings into sharp focus the ethics and multiple questions involved in keeping the world in optimal health-and identifies the massive tasks that lie ahead. Twenty-one internationally known contributors examine the bioethical, sociopolitical and scientific aspects of health, epidemics, aging populations, the double burden of disease, food safety, and other major health concerns of well-being at the international level. And because exporting health care expertise abroad entails more than merely translating what we know, they meet the controversies head-on:

- Are health technologies wisely used?
- Can today's medicine coexist with traditional views and cultural practices?
- Will the configuration of health resources change as people live longer?
- Why are pandemics not controlled better?
- Who wins when health systems clash with sociopolitical systems?
- Does globalization necessarily mean the westernization and homogenization of care?

Fast changing conditions and recent catastrophic events demand answers to these and similar vital questions. The authors of *Understanding the Global Dimensions of Health* balance realism, optimism and social conscience in their coverage so health professionals, policymakers and leaders can address them-locally as well as globally.

Emerging Viruses: AIDS And Ebola : Nature, Accident or Intentional?

by Leonard G. Horowitz (Author)

(Amazon)

Health professionals and those involved in infectious disease research will find Emerging Viruses startling: Harvard researcher Horowitz's studies gather evidence to conclude that AIDS and the Ebola viruses evolved during cancer virus experiments in which monkeys were infected with viral genes from other animals. Certain to spark controversy, this provides quite a different view of virus mutations and evolution.

Epidemiology

Epidemiology, Updated Edition: With STUDENT CONSULT Online Access

by Leon Gordis (Author)

(Amazon)

This popular book applies the author's many years of clinical and teaching experience to make the principles and methods of epidemiology easy to understand and enjoyable to read about. A clear, concise writing style and just the right dose of humor explain the role of epidemiology in measuring disease in a community, estimating risks, and influencing public policy and ethical concerns. Line diagrams, cartoons, and review questions with answers reinforce the text.

Intuitive Biostatistics

by Harvey Motulsky (Author)

Designed to provide a nonmathematical introduction to biostatistics for medical and health science students, graduate students in the biological sciences, physicians, and researchers, this text explains statistical principles in non-technical language and focuses on explaining the proper scientific interpretation of statistical tests rather than on the mathematical logic of the tests themselves.

Intuitive Biostatistics covers all the topics typically found in an introductory statistics text, but with the emphasis on confidence intervals rather than P values, making it easier for students to understand both. Additionally, it introduces a broad range of topics left out of most other introductory texts but used frequently in biomedical publications, including survival curves, multiple comparisons, sensitivity and specificity of lab tests, Bayesian thinking, lod scores, and logistic, proportional hazards and nonlinear regression.

By emphasizing interpretation rather than calculation, this text provides a clear and virtually painless introduction to statistical principles for those students who will need to use statistics constantly in their work. In addition, its practical approach enables readers to understand the statistical results published in biological and medical journals.

Sample Course Descriptions and Reading Lists

Princeton

Infection: Biology, Burden, Policy (SA)

Professor(s): Adel A. Mahmoud , Thomas E. Shenk , Burton H. Singer

Description/Objectives:

This course will examine fundamental determinants of human microbe interaction at the biological and ecological aspects. The focus will be on major global infectious diseases, their burden of illness, and policy challenges for adequate prevention and control. Each infectious agent will be discussed in terms of its mechanism of pathogenesis, disease progression, epidemiology, as well as strategies for its control. Specific emphasis will be placed on the public health aspects of each disease.

Sample Reading List:

Lederberg, J , *Infectious History*

Weiss, RA & McMichael, AJ , *Social and environmental risk factors in the emergence of infectious diseases.*

Global Health and Health Policy

Professor(s): Noreen J. Goldman , Alison M. Buttenheim

Description/Objectives:

This epidemiology course for undergraduate students in global health and health policy focuses on: measurement of health status, disease occurrence, survival, and the association between risk factors and health outcomes; design, analysis and interpretation of epidemiologic research studies; and bias and confounding. Other topics include synthesis of epidemiological studies, disease outbreaks, causal inference, social inequalities in health, and research ethics. The course will examine "individual-centered" epidemiology and "macro-epidemiology" to assess population impact and inform health policy.

Sample Reading List:

Leon Gordis, *Epidemiology*

Louise B. Russell, *Educated Guesses. Making Policy about Medical Screening Test*

Koepsell, Thomas D. and Noel S. Weiss, *Epidemiologic Methods: Studying the Occurrence of Illness*

John Snow, *On the Mode of Communication of Cholera*

R. Doll and A.B. Hill, *Mortality in Relation to Smoking: Ten Year's Observations*

R. Kirschstein, *Largest US Clinical Trial Ever Gets Under Way*

