History of Medicine/History of Science/IES
513/713

Environment and Health in Global Perspective
Fall 2014
2:30-3:45 MW, 224 Ingraham Hall

Gregg Mitman
Phone: 262-9140; Email: gmitman@med.wisc.edu
Office Hours: 1415 MSC, Tuesday, 9:00-10:30 am, or by appointment

Course Description:
Why are societies around the world having to confront newly emerging and re-emerging infectious diseases? What are the economic, political, and social forces that have shaped landscapes of health and illness across the globe? In what ways have the growth of cities, new industries, extractive economies, and development shaped human well-being?

This course places these questions in historical context by exploring the relationships between environmental change and human health from the 17th century to our time. It brings together historical, anthropological, and sociological perspectives to consider the history of ideas about environment and health as well as the ways in which changing environments have shaped experiences of health and illness. In addition, we will examine how places have mattered in the production of knowledge about health and illness, the politicization of disease, and global health interventions. We will also investigate the social, economic, and political determinants that have impinged upon and influenced health and healing at the regional and global levels.

Expectations:
This course is based on a seminar-discussion format. Each one in class needs to assume the responsibility of an active participant and learner. Success in the class depends largely upon the time, energy, and commitment you invest. You will be required to arrive at class having read the material assigned for the day and prepared to engage in a thoughtful and constructive conversation that is respectful of others in the classroom and takes seriously the issues and themes presented in the readings. You will also be expected to post one comment or question on the readings 12 hours in advance of each class session.

If any problem arises, either academic or personal, that might jeopardize your performance in the course, you must try to inform me of the problem at the next available office hour, or by leaving a message with the Department of Medical History and Bioethics (262-1460).

In compliance with the Americans with Disabilities Act, I urge any student in this course with a disability to inform me as soon as possible, so that I may make any necessary accommodations to ensure full participation and facilitate your educational opportunities. All such requests are confidential.

Students are expected to familiarize themselves with the UW policies on plagiarism and to assume responsibility for honesty in all course work.
Requirements:
Undergraduates:
- Attendance/Class participation 30%
- Critical Response papers (2) 20%
- Take-Home Exams 50%
  or
- Research paper

Graduate Students:
- Class/seminar participation 25%
- Book reviews (2) 30%
- Research Paper 45%

Readings:
All the materials for the course are posted electronically on the Learn@UW site for the course: https://uwmad.courses.wisconsin.edu/d2l/home/2541014

Class Schedule, Topics, and Readings
9/3  Introduction

Issues & Approaches
In the first two weeks of the class, our readings and discussions will focus on methodological and theoretical approaches that will serve as useful guides in our efforts to understand the changing historical relationships between environment and health across the globe. How do we define what constitutes health and illness? Is disease the result of pathology within the body, or might it be understood within a broader set of physical, economic, and social relationships in which human bodies are embedded? How does the very framing of an “environmental health” problem determine what are the solutions sought?

9/8  Ebola: Autopsy of an Outbreak


Richard Preston, “Crisis in the Hot Zone,” New Yorker (October 26, 1992), pp. 58-81

9/10  Framing Diseases Over Time

9/15  Ecologies of Health and Illness

9/17  Political Economy and the Social Costs of Production

Airs, Waters, and Places
In these four sessions, we explore the historical roots of medical, biological, and geographic ideas about disease that were both an outgrowth of, and shaped European interactions with new worlds and peoples. We will learn more about the place of disease in colonial expansion, the trans-Atlantic slave trade, the construction of biological conceptions of race, and the lasting legacy of environmental and biological determinism in explaining new world encounters. While many of these ideas may seem outdated, they tend to linger and reappear in new forms, as we will see throughout the course.

9/22  The Legacy of Hippocrates


9/24  Acclimatization, Race, and Disease


9/29  Slavery, the “Dark Continent,” and the White Man’s Grave


10/1  Revisiting New World Encounters
Germ Theory, Disease Ecology, and the Promise of Eradication

At what point did medical theorists begin to argue that various diseases stemmed from specific causative agents and what were the consequences for the way they tried to control the spread of disease? This section examines the transition from miasmatic to germ theories of disease at the turn of the twentieth century and the relationship to newly emerging disciplines of bacteriology, tropical medicine, ecology and epidemiology in the context of British and American imperialism. We will also explore the “golden age of medicine” in the post-WWII era that led to a confidence in the ability to globally eradicate diseases from smallpox to malaria, and the consequences that the success and failures of such programs have had in addressing newly emerging diseases.

10/6 The Colonial World of Tropical Medicine

Michael Worboys, “Germs, Malaria, and the Invention of Mansonian Tropical Medicine: From ‘Disease in the Tropics’ to ‘Tropical Diseases,’” in Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500-1900, edited by David Arnold (Amsterdam: Rodopi, 1996), pp. 181-207.


10/8 Markets, Quarantines, and American Empire


Benjamin Baker. “Panama as a Disease Spreader.” Boston Evening Transcript, 15 April 1914.

10/13 Magic Bullets


10/15 The Global Threat of Emerging Diseases

The Health of the City

More than half of the 7 billion people on the planet live in cities, and the number of those urban dwellers is estimated to double by 2050. How have the footprints and metabolism of cities -- from industrialization, to transportation, to inequality -- shaped the sciences of public health, environmental engineering, and toxicology; perceptions of disease risk and exposure; as well as social movements oriented around environmental justice and health? These are the questions we will be addressing in this section of the course.

10/20 Cities and Pathologies


10/22 Inefficiency, Waste, and the Bacteriological Revolution


10/27 Workplaces of Death


Landscapes of Energy and Illness

One of the biggest footprints of cities is the energy sources required to fuel their metabolism. In this section of the course, we look at the global impact of three of the largest energy sources—coal, oil, and uranium—used to sustain modern urban environments on the health and well-being of workers and communities whose livelihoods are tied to these extractive landscapes.

11/10 Black Lung


11/12 Being Nuclear


11/17 FILM SCREENING: Sweet Crude

11/19 Petrochemical Poisons


NOVEMBER 21ST, SECOND CRITICAL RESPONSE PAPER DUE

Feeding a Hungry World: The Politics of Population
Overpopulation is one of the most contentious of environmental issues. We take up this problem from a number of angles: from Cold War politics, to modern agriculture, to biomedical research. Our intent is to explore how issues of overpopulation and well-being have been framed and the consequences of corresponding interventions to try and lessen the size of the world’s population. How, for example, was the origin of ideas about the “third world” linked to burgeoning fears of overpopulation that emerged in the context of the Cold War? What have been some of the environmental and health costs to laborers immersed in the chemically laden environments manufactured by the Green Revolution, whose methods were intended to feed a growing and hungry world? And what are some of the ethical and human rights issues that have arisen in the experimentation and implementation of population control efforts in the developing world?

11/24 Third World Politics


11/26 NO CLASS

12/1 The Costs of the Green Revolution

12/3 Reproductive Experiments


Activism and Hope

12/10 WRAP UP

DECEMBER 12TH, 2ND TAKE HOME ESSAY DUE
Graduate students enrolled for 713 credit are responsible for all 513 readings. You are also required to attend an additional 1 hour biweekly meeting outside of the scheduled 2:30-3:45 M,W class time for 513. We will use this as an opportunity to discuss the course readings in greater depth as well as the following additional books that represent both classics and recent literature on the history of environment and health:


You are required to write a 750-word review for two out of the five books, summarizing the major themes and historiographic approach, which you should bring to our discussion of the book for that day.

We will also use these meetings as a chance to exchange ideas and drafts of your research papers for the class. This is a 15-20 page research paper based on both primary and secondary sources. The schedule for the steps to completing the research paper are as follows:

- Week 6—One-page research proposal due with bibliography
- Week 11—First draft of research paper due
- Week 15—Final draft of research paper due