

DEPARTMENT: Behavioral Sciences and Health Education

COURSE NUMBER: 579 SECTION NUMBER: 002 SEMESTER: Fall 2007

CREDIT HOURS: 2 **MEETINGS:** Tuesdays 1-2:50 PM

COURSE TITLE: Applied History of Public Health

REVISED AS OF 9 October 2007

INSTRUCTOR NAME: Dr. H. Kushner

ASSISTANTS: Darren Mays, MPH & Randi Williams

INSTRUCTOR CONTACT INFORMATION (see syllabus below for assistants)

EMAIL: hkushne@sph.emory.edu

PHONE: 404-727-9523

SCHOOL ADDRESS OR MAILBOX LOCATION: GCR 516

OFFICE HOURS: Tues 3-4 and by appointment

COURSE DESCRIPTION (3-4 Sentences)

The goal of this class is to explore the history of American public health in a comparative perspective. We will examine the role of infection, nutrition, genetics, immunity, environment and behavior and the scientific and philosophical systems that underlie our understanding of them as "causes" of disease. Second, the course will examine the social and environmental factors that have influenced population health including an examination of the categories of race, class, gender, and sex.

EVALUATION

Seminar participation: 10%

Weekly Postings: 50%

Research Question and Literature Review: 10%

Final Project (PowerPoint and Paper): 30%

15% PowerPoint presentation – most of this will focus on content but some attention is given to method of delivery, and ability to address questions

15% paper – content, logic of position, and quality of coverage on chosen issue

1

LEARNING OBJECTIVES OR COMPETENCIES OF THE COURSE

By the end of the semester, students should be able to:

- 1. Define the difference between public health and medical health in historical and environmental perspective. Students should be able to articulate the way biological, environmental, and social/cultural factors interact in "disease" production and how an understanding of these influences can influence prevention strategies.
- 2. Explain the difference between disease, syndrome, and illness. Students should be able to explain how signs and symptoms contribute to the broader understanding of diseases, syndromes, and illnesses as they relate to the population health.
- 3. List historical examples of the changing definitions of public health in a variety of cultures and times.
- 4. Explain how population health is framed and how public health responds, using tools such as epidemiology, biostatistics, environmental health, health education, and qualitative/quantitative research methods.
- 5. Provide examples of how race, class, gender, and sex have influenced modern responses to public health crises.
- 6. Compare and contrast the response to public health issues in different times and different cultures.

LEARNING OBJECTIVES OR COMPETENCIES FOR THE DEPARTMENT OR PROGRAM TO WHICH THE COURSE CONTRIBUTES

Under Health Education Track:

- Communicate both in written and oral format, with public health programs, community based organizations, and others involved in improving the public's health
- Advance the profession of public health
- Apply appropriate research principles and methods in health education
- Provide critical analysis of lessons to be learned from the past and present
- Conduct research using the highest ethical standards

Behavioral Sciences Track

- Communicate both in written and oral format, with public health programs, community based organizations, and others involved in improving the public's health
- Promote the adoption and integration of ethical behavioral science research methods and findings into a unified public health practice
- Provide critical analysis of lessons to be learned from the past and present

The History of Public Health

Teaching Assistant: Darren Mays and Randi Williams

Office: 5th Floor RSPH

Email: dmmays@sph.emory.edu; rmwilli@sph.emory.edu

Office Hours: By appointment

Class Organization:

Although there are a number of ways to organize the history of public health, this course will take a modified chronological approach in which issues affecting population health will also be examined comparatively. For instance, we will examine an initial epidemic of a particular disease and then compare it to later reoccurrences and to outbreaks in different geographic areas. In this way we should reach a more complex understanding of how particular population health issues have been understood in different times and places and what those responses may illuminate for current and future outbreaks.

Our historical examination will call on the tools and disciplines of public health—including epidemiology & biostatistics, environmental health, health policy, health education, and qualitative/quantitative methods—recognizing, at the same time, the extent to which these tools and disciplines have been constructed and shaped by the categories of public health concerns. What constitutes public health, like so much else in the health sciences, have been greatly influenced by economics, politics, culture, and society. Nevertheless, the role of organic mechanisms cannot be ignored in any history of public health. Thus, we will also become familiar with the biological mechanisms of disease to the extent that they influence and inform political, social and cultural experience of public health.

A related goal of this seminar is to examine the rules for determining causation in public health and how those rules have developed and mutated. Thus, we will explore the historical development of biomedical and epidemiological criteria for determining causality and definition of disease based on clinical evidence, pathology, laboratory data, and exposure. The seminar will examine these criteria in the context of the contribution of cultural, environmental, and political factors. Having done this, we expect that seminar participants will be able to critically evaluate more general claims of disease causality.

Assignments:

Using a problem-based approach, seminar members, working in teams, will explore an issue in the history of public health not explicitly examined in the course readings and syllabus and offer tentative explanations for determining its risks to health in an historical and comparative framework. Each topic must include an environmental component. Topics will be selected in consultation with the instructor. Teams will begin their collaborations in September. Each team will examine the cultural, historical, environmental, and epistemological assumptions that have framed the understanding of what constitutes necessity and (in)sufficiency in the etiology and of a selected disease or condition associated with the history of public health. In addition, teams will then relate their final projects, in a cumulative manner, to major issues discussed in the class (e.g. issues of stigma and TB/Typhoid outbreaks; pollution and cholera). Teams will make

presentations for the seminar in late November and early December. Details of the final assignments will be posted on the blackboard homepage early in the semester.

Student Involvement:

As a seminar, this course is designed to be interactive. Students are expected to provide thoughtful contributions to weekly discussions based on the assigned readings and in-class lectures. In order to facilitate a high level of discussion, students are required to:

- 1. Read the assigned reading prior to the class meeting and to participate in discussions. The quality of participation in seminar discussions will influence the final grade.
- 2. Come to all class meetings on time. If you are unable to attend a meeting, or will be late, please inform the instructor and TAs in advance. Unexcused absences and lateness will be reflected in your final grade.
- 3. Each week, a question or issue will be posed on Blackboard and students will be required to prepare concise answers and discussions of these questions and issues, as instructed for that week on Blackboard. The responses should reflect underlying themes or issues arising from the readings for that week and informed by the issues that have emerged during the semester. Responses must be posted on the course Blackboard site by **5:00 PM on the Monday** prior to that week's class meeting. Late postings will not be accepted. To post your weekly summary paper, go to the "Weekly Postings" area of Blackboard, locate the current unit for the week, and "respond" to that unit's designated thread.

Writing Assignments:

A detailed description of the oral and written assignments is found in section three. Briefly, teams will have three reports due:

- 1) 2 October: Research Questions submitted for review.
- 2) 15 October: Research question and annotated bibliography of team project
- 3) 27 November: 4 teams present PowerPoint presentation; papers posted to blackboard 2 WEEKS later
- 4) 4 December: 4 teams present PowerPoint presentation; papers posted to blackboard 1 WEEK later
- 5) 10 December: Final papers posted to blackboard and turned in to TA mailboxes by 5 PM

Required Texts

Wills, Christopher. *Yellow Fever, Black Goddess: The Coevolution of People and Plagues.* Reading, MA: Addison Wesley, 1996.

Davis, Mike. *The Monster at our Door: The Global Threat of Avian Flu.* The New Press, 2005.

SUGGESTED SUPPLEMENTAL TEXTS

All readings are available on blackboard; however you might want to purchase the following books because they provide useful supplemental material.

Watts, Sheldon. *Epidemics and History: Disease, Power, and Imperialism.* New Haven: Yale University Press, 1997.

Garrett, Laurie. Betrayal of Trust: The Collapse of Global Public Health. Indiana: Little Brown, 2000.

Useful Reference Tools:

See external links on Blackboard

Please check the course Blackboard website frequently as the syllabus is subject to change

COURSE ASSIGNMENTS:

4 September: Introduction: What is/was Public Health? What Constitutes Etiology in Public Health?

Required Reading:

Wills, Christopher Wills, "The Delicate Balance Between Life and Death," in *Yellow Fever*, *Black Goddess: The Coevolution of People and Plagues* Reading, MA: Addison Wesley, 1996, 3-49.

Recommended Reading:

Rosenberg, Charles E. "Introduction: Framing Disease: Illness, Society, and History," in *Framing Disease: in Cultural History*. Charles E. Rosenberg and Janet Golden, eds. New Brunswick: NJ: Rutgers University Press, 1991, pp. xiii-xxvi.

Aronowitz, Robert A. "Making Sense of Illness: Science, Society, and Disease." New York: Cambridge University Press, 1998, pp. 1-18.

- Evans, Alfred S. "Concepts and Background of Causation," and "Causation and Occupational Diseases" in Evans, *Causation and Disease: A Chronological Journey*. New York: Plenum Publishing Co, 1993, pp. 1-12.
- Sutter, Morley C. "Assigning Causation in Disease: Beyond Koch's Postulates," *Perspectives in Biology and Medicine*, 39 (1996): 581-592.

11 September: Black Death: Bubonic Plague or Was it? What an Understanding the Environment of People and Rats may Reveal

Required Reading:

McEvedy, Colin. "The Bubonic Plague," Scientific American, 258 (1988): 118-123.

- Cunningham, Andrew. "Transforming Plague: The Laboratory and the Identity of Infectious Disease," in *The Laboratory Revolution in Medicine*, edited by Andrew Cunningham and Perry Williams, Cambridge: Cambridge University Press, 1992, pp. 209-244.
- Risse, Guenther B. "'A Long Pull, A Strong Pull, and All Together': San Francisco and Bubonic Plague, 1907-1908." *Bulletin of the History of Medicine*, 1992, 66: 260-286.

Recommended Reading:

- Cohn, Samuel, J. "The Black Death: End of a Paradigm," *American Historical Review*, 107 (June, 2002), 703-738.
- Garrett, Laurie. "Filth and Decay: Pneumonic Plague Hits India and the World Responds," in *Betrayal of Trust: The Collapse of Global Public Health*. Indiana: Little Brown, 2000, pp. 15-49
- Wills, Christopher Wills, "Chief Monter That has Plagued the Nations, yet," in *Yellow Fever*, *Black Goddess: The Coevolution of People and Plagues* Reading, MA: Addison Wesley, 1996, 53-102.

18 September: Smallpox

Required Reading:

- Crosby, Alfred. "Conquistador y Pestilencia," in *The Columbian Exchange: Biological and Cultural Consequences of 1492*, Alfred W. Crosby, Westport, CN: Greenwood, 1972.
- Leavitt, Judith Walzer, "'Be Safe, Be Sure.' New York City's Experience with Epidemic Smallpox," in *Sickness and Health in America: Readings in the History of Medicine and Public Health*, Editors Juidth Walzer Leavitt and Ronald L. Numbers, 3rd revised ed., Madison: University of Wisconsin Press, 1997, 407-417 pp. 385-389.

Mack, Thomas. "A different view of smallpox and vaccination." *The New England Journal of Medicine*, 348, no. 5, 2003, 460-463.

Schwartz, John. "Soldier's Smallpox Inoculation Sickens Son", New York Times, 18 May 2007.

Recommended Reading:

- Breman, J.G., & Henderson, D.A. "Diagnosis and management of smallpox." New England Journal of Medicine, 346, no. 17, 2002, 1300-1308.
- Watts, Sheldon. "Smallpox in the New World and the Old," in *Epidemics and History: Disease, Power, and Imperialism*. New Haven: Yale University Press, 1997, pp. 84-121.

Further Reading:

- Baxby, Derrick. "Should Smallpox Virus be Destroyed? The Relevance of the Origins of Vaccinia Virus," *Social History of Medicine*, 9 (1996): 117-119.
- Razzell, Peter. "The Origins of Vaccinia Virus--A Brief Rejoinder," *Social History of Medicine*, 11 (1998): 107-108.

25 September: Tuberculosis & Typhoid Fever: Public Health Interventions that "Worked?"

Required Reading:

- Hunter, Tera W. "Tuberculosis as the 'Negro Servants' Disease," Chapter 9 in Hunter, *To 'Joy My Freedom: Southern Black Women's Lives and Labors after the Civil War*. Cambridge, MA; London: Harvard University Press, 1997.
- Wills, Christopher. Chapter 7: "A Cleverer Pathogen" in *Yellow Fever, Black Goddess: The Coevolution of People and Plagues*. Reading, MA: Addison Wesley, 1996, pp. 131-145.
- Leavitt, Judith Walzer. "'Typhoid Mary' Strikes Back: Bacteriological Theory and Practice in Early Twentieth Century Public Health," *ISIS*, 83(1992): 608-629.

Schwartz, John. "Conflicting Accounts in TB Patient's Odyssey" New York Times, 2 June 2007.

Markel, Howard. "Return of the White Plague" The Washington Post, 10 June 2007.

Altman, TB Tests Show Promise, but Flaws Limit Progress, New York Times, 24 July 2007.

Recommended Reading:

- Feldberg, Georgina D. "Coping with Koch's Challenges: Bacteria, Biologics, and the Economy of Disease," in Feldberg, *Disease and Class: Tuberculosis and the Shaping of Modern North American Society*. New Brunswick, NJ: Rutgers University Press, 1995, pp. 36-80.
- Dubos, Rene and Jean Dubos. *The White Plague: Tuberculosis, Man, and Society.* New Brunswick and London: Rutgers University Press, 1987, pp. iv-xxxiv; 94-228.
- Mendolsohn, J. Andrew. "'Typhoid Mary' Strikes Again: The Social and Scientific in the Making of Modern Health," *ISIS*, 986(1995): 228-277.

2 October: Research Question submitted for review

2 October: Cholera

In class film

Required Reading:

- Wills, Christopher. "Chapter 6: Cholera, The Black One," in *Yellow Fever, Black Goddess: The Coevolution of People and Plagues*. Reading, MA: Addison Wesley, 1996, pp. 105-130
- Watts, Sheldon. "Cholera & Civilization: Great Britain and India, 1870 to 1920," in *Epidemics and History: Disease, Power, and Imperialism*. New Haven, Yale University Press, 1997, pp. 167-212.
- Arnold, David. "Cholera and Colonialism in British India." *Past and Present*, no. 113, 1986, 118-151.

Recommended Reading:

- Rosenberg, Charles. "Cholera in Nineteenth-Century Europe: A Tool for Social and Economic Analysis." *Comparative Studies in Society and History*, 8, 1966, 452-463.
- Shears, Paul. "Recent Developments in Cholera." *Current Opinion in Infectious Diseases*, 14, 2001, 553-558.

9 October: Fall Break - No class meeting

16 October: Research Question and Annotated Bibliography DUE

16 October: "Race" and Disease

Required Reading:

- Galishoff, Stuart. "Germs Know No Color Line: Black Health and Public Policy in Atlanta, 1900-1918." *Journal of the History of Medicine*, 40 (1985): 22-41.
- Braun, L. "Race, Ethnicity, & Health: Can Genetics Explain Disparities," *Perspectives in Biology and Medicine*, 42 (2002), 159-174.
- Wailoo, Keith, "Race Pathologies, Apparent and Unseen," in *Dying in the City of Blues: Sickle Cell Anemia and the Politics of Race and Health.* Chapel Hill, Univ. of North Carolina Press, 2001, pp. 55-83.
- Tapper, Melbourne. "An 'Anthropology' of the 'American Negro': Anthropology, Genetics, and the New Racial Science, 1940-1952," *Social History of Medicine*, 10 (1997), pp. 263-289.
- Kahn, J. Race in a Bottle. *Scientific American*, August 2007, p. 40-45.

Recommended Reading:

Brown, JoAnne. "Purity an Danger in Color: Notes on Germ Theory and the Semantics of Segregation in Gaudilliere & Lowy eds. *Heredity, and Infection: the History of Disease Transmission*, New York, Routledge, 2003, 101-131.

23 October: The Decline of Infant Mortality: Public Health, or Medical Science?

Required Reading:

- McKeown, Thomas. "Food, Infection, and Population." *Journal of Interdisciplinary History*, 14 (1983): 227-247.
- Condron, Gretchen A., Henry Williams, and Rose A. Cheney. "The Decline of Mortality in Philadelphia from 1870-1930: The Role of Municipal Services," in *Sickness and Health in America: Readings in the History of Medicine and Public Health*, Editors Juidth Walzer Leavitt and Ronald L. Numbers, 2nd revised ed., Madison: University of Wisconsin Press, 1985, pp. 385-389.
- Fogel, Robert W., "Secular Trends in Physiological Capital: Implications for Equity in Health Care," *Perspectives in Biology and Medicine* 46.3 Supplement (2003) S24-S38.

Recommended Reading:

Marmot, Michael. "Understanding Social Inequalities in Health," Perspectives in Biology and Medicine," 46, Supplement (2003), s9-s23.

- Marks, Harry, Gretchan A. Condron, Richard A. Meckel, Gerry Kearns, and Samuel Preston. "Demography and History around 1900: A Symposium on the Fatal Years," *Bulletin of the History of Medicine*, 68(1994): 85-128.
- Grob, "Stopping the Spread of Infection," from The Deadly Truth: A History of Disease in America," Harvard Univ. Press, 2003, Ch 8 pp. 180-216.

30 October: The Origin of HIV/AIDS

Required Reading:

- Epstein, Helen. The Invisible Cure: Africa, the West, and the Fight Against AIDS. Farrar, Straus, and Giroux: New York, 2007. Chapters 2 and 3, pp. 39-65.
- Hooper, Edward. (2002) Origins of HIV and the AIDS Epidemic. *Philosophical Transactions: Biological Sciences*, 356(1410); 801-814.
- Halperin, Sydney A. Lesser Harms: The Mortality of Risk in Medical Research. The University of Chicago Press: Chicago, IL, 2004. Chapter 2, pp. 41-66.

Recommended Reading:

Hooper, Edward. The River: A Journey to the Source of HIV and AIDS. Little, Brown, and Company: New York, 1999.

6 November: Influenza

In Class Film

PBS Frontline Video: "Influenza 1918, The Worst Epidemic the United States has ever Known" http://www.pbs.org/wgbh/amex/influenza/filmmore/index.html

Required Readings:

- Davis, Mike, The Monster at our Door: The Global Threat of Avian Flu, The New Press, 2005
- John M. Barry, The Great Influenza: The Epic Story of the Deadliest Plague in History, "The Swarm," chapters 7-8, pp. 98-115.
- Grob, "Stopping the Spread of Infection," from The Deadly Truth: A History of Disease in America," Harvard Univ. Press, 2003, Ch 9 pp. 217-241.
- Markel H., et al. Nonpharmaceutical interventions implemented by US cities during the 1918-1919 influenza pandemic. *JAMA*, 2007, 298(6).

Recommended:

Crosby, Alfred W. America's Forgotten Pandemic: The Influenza of 1918. New York: Cambridge University Press, 1990.

Further Reading:

Garrett, Laurie. The Next Pandemic? Foreign Affairs, 84, July/August 2005:3-24.

Garrett. Laurie. "The American Bicentennial: Swine Flu and Legionnaire's Disease," in The Coming Plague: Newly Emerging Diseases in a World Out of Balance. New York: Penguin, 1994, pp. 152-189.

Karesh, William B., Cook, Robert A., The Human-Animal Link, Foreign Affairs, Jul/Aug 2005, Vol. 84, Issue 4, 38-50.

Kolata, Gina Flu: The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus that Caused It. New York: Simon & Schuster, 1999. pp. 1-28; 48-84.

Niall P. A. S. Johnson and Juergen Mueller, "Updating the Accounts: Global Mortality of the 1918-1920 Spanish" Influenza Pandemic," Bulletin of the History of Medicine 76.1 (2002) 105-115

Reynolds, Gretchen, "The Flu Hunters," New York Times Sunday Magazine, 7 November 2004.

Avian Flu, Uncertain Threat, 4 brief articles from the New York Times Science Section, 28 March 2006:

McNeil, "Virus Expert Quite Scared", New York Times Science Section, 28 March 2006.

Rosenthal, "Pandemic Worrisome, but Unlikely," *New York Times* Science Section, 28 March 2006.

Grady & Kolata, "Avian Flu: Uncertain Threat," *New York Times* Science Section, 28 March 2006.

Kolata, "Clues from the 1918 Epidemic, New York Times Science Section, 28 March 2006.

13 November: Risk: Obesity and Smoking

Required Reading:

Ritz, B. et al. "Pooled analysis of tobacco use and risk of Parkinson disease." Archives of Neurology, 2007; 64(7): 990-997.

Brandt, Alan. "The Cigarette, Risk, and American Culture," *Daedalus*, 1990: 155-176.

- Oliver, J.E., The politics of Pathology: How Obesity Became an Epidemic Disease. *Perspectives in Biology and Medicine*, 46 (Autumn, 2006) 611-627.
- Tierney, John. Diet and Fat: A Severe Case of Mistaken Consensus. *The New York Times*, October 9, 2007.
- Taubes, G. (2001). The Soft Science of Dietary Fat. Science, 2001: 2356.

Recommended:

- Uretsky, S., Messerli, F.H., Bangalore, S., Champion, A., Cooper-DeHoff, R.M., Zhou, Q, & Pepine, C.J. (2007). Obesity Paradox in Patients with Hypertension and Coronary Artery Disease. *The American Journal of Medicine*, 120(10), 863-870.
- Greene, Jeremy A. Prescribing by Numbers: Drugs and the Definition of Disease. Johns Hopkins University Press: Baltimore, MD, 2006.
- Colin Talley, Howard I. Kushner, & Claire E. Sterk, "Lung Cancer, Chronic Disease Epidemiology, and Medicine, 1948-1964," *Journal of the History of Medicine*. 2004, 59:329-373.
- Sullum, Jacob, "Smoke Alarm," in For Your Own Good: The Anti-Smoking Crusade and the Tyranny of Public Health (New York: The Free Press, 1998), pp. 138-180.
- Gibbs, W. Wayt "Obesity: An Overblown Epidemic?" *Scientific American*, 00368733, Jun2005, Vol. 292, Issue 6
- CNN.com: Fit Nation: http://www.cnn.com/SPECIALS/2007/fit.nation/obesity.map/
- Oppenheimer, Gerald. "Becoming the Framingham Study: 1947-1950." *American Journal of Public Health.* April 2005, 95: 602-610.
- 20 November: No class meeting—Work on your final projects.

27 November: 4 Team PowerPoint Presentations

- Please post your PPT presentations to blackboard by 5 PM the night before
- If you present 29November, your papers are due 12 December by 5 PM
- Please post papers to Blackboard on due date as well as hand in a hard copy

4 December: 4 Team PowerPoint Presentations

- Please post your PPT presentations to blackboard by 5 PM the night before
- If you present on 6 December, your papers are due 12 December by 5 PM

Please post papers to Blackboard on due date as well as hand in a hard copy

10 December: All Final Papers Posted by 5 PM

 Please post papers to Blackboard on due date as well as hand in a hard copy to the TAs' mail folder