

Public Policy 352: Economics and Public Health in the Developing World

Time: MW 10:30AM – 11:50AM

Location: Harris School Woodlawn Room

Instructor: Daniel Bennett
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Teaching Assistant: Anjali Oza
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Office hours: Tuesday 12PM-1:30PM

Course Description:

This course uses the tools of applied microeconomics to explore major public health issues in the developing world. After establishing an economic approach to disease and health behavior we consider several topics including HIV, malaria, diarrhea, and air pollution. The course will also examine how patients interact with doctors and pharmacists in health care markets. Each topic will feature several papers that illustrate a modern approach to the issue and highlight useful empirical strategies. Along the way, we will weigh the merits of common policy responses to these problems.

Prerequisites:

Statistics: PP311 (or PP313), or equivalent
Economic theory: PP323 and PP324, or equivalent

Course Materials:

Please see the course website on CHALK for readings and assignments.

Workload:

You should attend class every day. Please read and understand the day's material before arriving for class and be prepared to discuss the papers and raise questions.

The course will include a final exam, which we will schedule for the exam period.

During the course you will receive five assignments, which will help you think more deeply about the material being covered. You will have one week to complete each

assignment. Please turn in each assignment at the end of class on the due date. Staple all loose pages together and write your name on your work (this should go without saying).

Assignments will be graded on a scale of 1 to 5, however no late work will be accepted. To be flexible about extenuating circumstances, I will incorporate the four highest assignment scores into your grade. In exchange, I will not entertain any excuses for missing or late work.

Assignments will be due on the following days:

<u>Assignment</u>	<u>Due Date</u>
1	October 8
2	October 22
3	November 5
4	November 19
5	December 3

Grades:

I will use the following weights to calculate course grades:

50% assignments

50% final exam

Tentative Course Schedule:

<u>Week</u>	<u>Topic</u>
1	Introduction
2	Health Investment
3	Health Investment
4	Health Investment
5	Behavior and Epidemiology
6	HIV/AIDS
7	Malaria
8	Diarrhea
9	Air Pollution
10	Pharmaceuticals and the Marketplace

Reading List:

1. Introduction

Sachs, Jeffrey D., *The End of Poverty: Economic Possibilities for Our Time*, 2005:

Chs. 1, 10, 12

Banerjee, Abijit, Angus Deaton, and Esther Duflo, "Wealth, Health, and Health Services in Rural Rajasthan," *American Economic Review*, 94(2), May 2004

Cutler, David, Angus Deaton, and Adriana Lleras-Muney, "The Determinants of Mortality," *Journal of Economic Perspectives*, 20(3), Summer 2006

Deaton, Angus, "Health in an Age of Globalization," August 2004, NBER Working Paper 10669

Ray, Debraj, *Development Economics*, 1998: *Appendix 2*

2. Health Investment 1: Optimization

Ray, Debraj, *Development Economics*, 1998: *Chapter 8, Sections 8.3.4, 8.4.2*

Behrman, Jere and Anil Deolalikar, "Health and Nutrition," *Handbook of Development Economics*, Volume 1, 1988, Chapter 14: *Sections 1-3*.

Subramanian, Shankar and Angus Deaton, "The Demand for Food and Calories," *Journal of Political Economy*, 104(1), February 1996

Gertler, Paul and Jonathan Gruber, "Insuring Consumption Against Illness," *American Economic Review*, 92(1), March 2002

Foster, Andrew and Mark Rosenzweig, "A Test for Moral Hazard in the Labor Market: Contractual Arrangements, Effort, and Health," *Review of Economics and Statistics*, 76(2), May 1994

Pitt, Mark and Wendy Sigle, "Seasonality, Weather Shocks, and the Timing of Births and Child Mortality in Senegal," 1997, Working Paper

Pitt, Mark, Shahidur Khandker, Omar Haider Chowdhury, and Daniel Millimet, "Credit Programs for the Poor and the Health Status of Children in Rural Bangladesh," *International Economic Review*, 44(1), February 2003

3. Health Investment II: Implications

Viscusi, W. Kip, "The Value of Risks to Life and Health," *Journal of Economic Literature*, 31(4), December 1993

Case, Anne, Angela Fertig, and Christina Paxson, "The Lasting Impact of Childhood Health and Circumstance," *Journal of Health Economics*, 24, 2004

Almond, Douglas, "Is the 1918 Influenza Pandemic Over? Long-Term Effects of *In Utero* Influenza Exposure in the Post-1940 U.S. Population," *Journal of Political Economy*, 114(4), 2006

Stillman, Steven and Duncan Thomas, "Nutritional Status During an Economic Crisis: Evidence from Russia," 2007, Working Paper

Thomas, Duncan and coauthors, "Causal Effect of Health on Labor Market Outcomes: Evidence from a Random Assignment Iron Supplementation Intervention," 2004, Working Paper

4. Behavior and Epidemiology

Gersovitz, Mark and Jeffrey Hammer, "Infectious Diseases, Public Policy, and the Marriage of Economics and Epidemiology," *World Bank Research Observer*, 18(2), Fall 2003

Philipson, Tomas and Richard Posner, *Private Choices and Public Health: The AIDS Epidemic in an Economic Perspective*, 1993: Introduction, Chapters 1 and 2.

Kremer, Michael, "Integrating Behavioral Choice in Epidemiological Models of AIDS," *Quarterly Journal of Economics*, 111(2), May 1996

Philipson, Tomas, "Economic Epidemiology and Infectious Diseases," *Handbook of Health Economics, Volume 1B*, 2000, pp. 1671-1699

5. HIV/AIDS

Lakdawalla, Darius, Neeraj Sood, and Dana Goldman, "HIV Breakthroughs and Risky Sexual Behavior," *Quarterly Journal of Economics*, August 2006

Magruder, Jeremy, "Marital Shopping and Epidemic AIDS," 2008, Working Paper

Thornton, Rebecca, "The Demand for and Impact of Learning HIV Status: Evidence from a Field Experiment," 2006, Working Paper

Gray, Ronald and coauthors, "Male Circumcision for HIV Prevention in Men in Rakai, Uganda: a Randomized Trial," *Lancet*, 369, February 2007

Oster, Emily, "Sexually Transmitted Infections, Sexual Behavior, and the HIV/AIDS Epidemic," *Quarterly Journal of Economics*, May 2005

Philipson, Tomas and Richard Posner, *Private Choices and Public Health: The AIDS Epidemic in an Economic Perspective*, 1993: Chapters 5 and 6.

6. Malaria

Gallup, John Luke and Jeffrey Sachs, "The Economic Burden of Malaria," *American Journal of Tropical Medicine and Hygiene*, 64(1)S, 2001

Cutler, David, Winnie Fung, Michael Kremer, and Monica Singhal, "Mosquitoes: the Long-Term Effects of Malaria Eradication in India," 2007, NBER Working Paper 13539

Lucas, Adrienne, "The Impact of Malaria Eradication on Fertility and Education," 2008, Working Paper

Maxwell, C.A., R.T. Rwegoshora, S.M. Magesa, and C.F. Curtis, "Comparison of Coverage with Insecticide-Treated Nets in a Tanzanian Town and Villages Where Nets and Insecticide are Either Marketed or Provided Free of Charge," *Malaria Journal*, 5(44), May 2006

Coelho, Philip and Robert McGuire, "Biology, Diseases, and Economics: An Epidemiological History of Slavery in the American South," *Journal of Bioeconomics*, 1, 1999

7. Diarrhea

Melosi, Martin, *The Sanitary City*, 2000: Chapters 1-3.

Ferrie, Joseph and Werner Troesken, "Water and Chicago's Mortality Transition, 1850-1925," *Explorations in Economic History*, 45, 2008

Bennett, Daniel, "Clean Water Makes You Dirty: Water Supply and Sanitation Behavior in the Philippines," 2008, Working Paper

Kremer, Michael and Edward Miguel, "The Illusion of Sustainability," *Quarterly Journal of Economics*, forthcoming

Bleakley, Hoyt, "Disease and Development: Evidence from Hookworm Eradication in the American South," *Quarterly Journal of Economics*, 2007

8. Air Pollution

Bruce, Nigel, Rogelio Perez-Padilla, and Rachel Albalak, "Indoor Air Pollution in Developing Countries: a Major Environmental and Public Health Challenge," *Bulletin of the World Health Organization*, 78(9), 2000

Pitt, Mark, Mark Rosenzweig, and Md. Nazmul Hassan, "Short- and Long-Term Health Effects of Burning Biomass in the Home in Low-Income Countries," 2006, Working Paper

Jayachandran, Seema, "Air Quality and Early-Life Mortality: Evidence from Indonesia," 2008, NBER Working Paper 14011

Duflo, Esther, Michael Greenstone, and Rema Hanna, "Indoor Air Pollution, Health, and Economic Well-Being", 2008, Working Paper

9. Pharmaceuticals and the Marketplace

Chetley, Andrew, *Problem Drugs*, 1995, Introduction, Ch. 10

Bennett, Daniel, Tsai-Ling Lauderdale, and Che-Lun Hung, "Competing Doctors, Antibiotic Use, and Antibiotic Resistance in Taiwan," 2008, Working Paper

Das, Jishnu and Jeffrey Hammer, "Money for Nothing: the Dire Straits of Medical Practice in Delhi, India", 2005, World Bank Policy Research Working Paper 3669

Lybecker, Kristina, "Rx Roulette: Combatting Counterfeit Pharmaceuticals in Developing Nations," *Managerial and Decision Economics*, 28, 2007

Berndt, Ernst and coauthors, "Advanced Market Commitments for Vaccines Against Neglected Diseases: Estimating Costs and Effectiveness", 2006, Working Paper

Kremer, Michael, "Pharmaceuticals and the Developing World", *Journal of Economic Perspectives*, 16(4), 2002