

# Milken Institute School of Public Health

THE GEORGE WASHINGTON UNIVERSITY

Department of Global Health

PubH 6440 Spring, 2015

Global Health Economics and Finance, 2 Credits

Monday, 6:10pm-8:00pm, GWSPH Room 200B

## Instructor

### Dr. Sarah Baird

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Office Hours: Wednesday 2pm-4pm OR by appointment

### Teaching Assistant

Vibhuti Haté  
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Office Hours: Thursday 12pm-2pm OR by appointment (held in 3<sup>rd</sup> floor team room)

## Course Description

This course examines economics and finance principles as they apply to global health. Students will study issues in the organization, delivery and financing of health care in developing countries. The course first provides students with a 'toolkit' for analyzing issues related to global health economics and finance and then asks the students to apply this 'toolkit' to a variety of a global health issues including demand for health, policy tools to increase demand for health, healthcare financing, social insurance, pharmaceuticals and HIV/AIDS.

## Course Prerequisite(s):

PubH 6400-Global Health Frameworks

## Program Competencies (list)

1. Describe how health system performance is affected by various approaches to health system organization, financing and workforce development.
2. Describe the economic challenges faced by low and middle-income countries regarding health status of their populations and health care delivery options and how different policy approaches can be used to address these challenges.
3. Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.

<b>Course Learning Objectives – Upon completion of the course, students will be able to:</b>	<b>Meets Competency Number</b>
• Define fundamental principles of health economics	# 1
• Explain how health economics principles apply to global health problems.	# 1
• Describe key issues facing developing countries related to health care financing.	# 2
• Use economic analysis to evaluate problems faced by the global health arena.	# 2
• Evaluate research findings related to health economics.	# 3

### Required Texts

(Readings should be completed before coming to class!)

<b>Title</b>	<b>Author</b>	<b>Edition</b>
<i>The Economics of Health and Health Care</i>	Folland, Goodman, and Stano (FGS in Syllabus)	Seventh

### Recommended/Supplemental Texts

<b>Title</b>	<b>Author</b>	<b>Edition</b>
Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty	Banerjee and Duflo	N/A
More Than Good Intentions: How a New Economics is Helping to Solve Global Poverty	Karlan and Appel	N/A

### Methods of Instruction

<input checked="" type="checkbox"/> Lectures	<input checked="" type="checkbox"/> Class and Small Group Discussions
<input checked="" type="checkbox"/> Case Studies	<input checked="" type="checkbox"/> Student Presentations
<input checked="" type="checkbox"/> Required Readings/Textbook	<input type="checkbox"/>
<input checked="" type="checkbox"/> Recommended/Supplemental Readings	<input type="checkbox"/>

### Methods of Evaluation

### Percent of Grade

Homework Assignments (two)	15%
Policy Memo + Presentation	20%
Class Participation	10%
Mid-term	15%
Final	30%
Event Write Ups	10%

1. **Homework Assignments:** You will have two homework assignments during the course of the semester. These will be a series of problems that apply the material learned in class. Although you may discuss the case studies/homework assignments with other students, the written

assignment you turn in must be your own work in your own words. If you copy another student's assignment or let someone else copy yours, you are both cheating.

2. **Topic Write Ups:** There are many interesting health economics seminars and conferences held in the DC area each year. You will be asked to attend two events (there will be many options so you should all be able to attend at least two). Please feel free to suggest talks that address health/development economics as I would be happy to include them. You will be required to do a brief write-up of the seminar/paper (no more than 2-3 pages). This write up will be due one week after the relevant talk. This write up should include:
  - a. Brief description of paper/talk including the research question the author is asking and its contribution to the literature
  - b. Brief description of the population being studied
  - c. Brief description of the methodology
  - d. Discussion of strengths/weaknesses of the paper
  - e. Policy relevance
  - f. List of questions
3. **Policy Memo:** The class will be assigned a policy memo (no longer than 1500 words, not including references). In the memo, you will describe a specific challenge related to health in a developing country context, describe the current policy environment, discuss the underlying health economics issues (including a critical reading of the related academic literature), and suggest policy improvements based on this reading and your knowledge of the context. Each student should write his or her memo individually. Students will be required to prepare a short 3 minute presentation on their topic for the final session of class.
4. **Exam:** There will be a midterm and final exam

#### **Class Policy: Participation and Discussion**

Your class participation grade will be based on attending class and participating during in class discussions as well as online discussion boards. *If you do not attend class and/or do not contribute to discussions, this will impact your ability to receive participation points thereby impacting your overall grade.*

#### **Grading Scale and Standards**

A: 94-100  
A-: 90-93.9  
B+: 87-89.9  
B: 84-86.9  
B-: 80-83.9  
C+: 77-79.9  
C: 74-76.9  
C-: 70-73.9  
F: 69.9 and below

#### **Class Policy: Late Work**

Under extenuating circumstances a student may ask the instructor for extended time to complete the assignment. It is the instructor's choice to grant an extension or not. Outside of these exemptions, every day that an assignment is late will result in 5% reduction in the grade, up to 3 days, at which time the student will receive 0 credit for the assignment.

#### **Class Policy: Make-up Exams**

Any student who experiences significant family or personal illness or emergency after the final withdrawal date and is unable to complete course work should ask the instructor for an incomplete for the course. Each case will be managed on an individual basis.

#### **Class Policy: Re-grading**

I am willing to entertain re-grade requests for homework, mid-terms and final exams, subject to the following rules. Re-grade requests will only be accepted within one week of returning the

assignment. Requests must be written, and explain clearly why you feel you deserve more points. I will re-grade the entire exam, not just the question you have highlighted. This means that your grade can go up and it can go down. I will answer the re-grade request within a week. At that point, the grade is final and not subject to further discussion.

### **Blackboard**

Blackboard will be used for posting course files and assignments and for communicating with the class. You are already enrolled for this course on Blackboard if you have completed registration for the course. It is your responsibility to periodically check the course site (log in at <http://blackboard.gwu.edu/> Using your gwu.edu address) for updates to the syllabus/readings.

### **Academic Integrity**

All Milken Institute School of Public Health Students are required to complete two (separate) online activities regarding academic integrity -- the GW Academic Integrity Activity and the Identifying and Avoiding Plagiarism Activity. Both activities must be completed within 2 weeks of starting your coursework at Milken Institute School of Public Health. - See more at: <https://publichealth.gwu.edu/integrity#sthash.FIIRdO5H.dpuf>

Please review the University's policy on academic integrity, located at [www.gwu.edu/~ntegrity/code.html](http://www.gwu.edu/~ntegrity/code.html) and complete the online training for all GWSPH students; All graded work must be completed in accordance with the George Washington University Code of Academic Integrity.

Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information. Common examples of academically dishonest behavior include, but are not limited to, the following: cheating; fabrication; plagiarism; falsification and forgery of University academic documents; facilitating academic dishonesty.

### **Students with Disabilities**

If you feel you may need an accommodation based on the impact of a disability, please contact your instructor privately to discuss specific needs. Please contact the Disability Support Services Office at 202.994.8250, <http://gwired.gwu.edu/dss> , to establish eligibility and to coordinate reasonable accommodations

### **Adverse Weather/Class Cancellation**

In the advent of inclement weather or any other emergency, the Milken Institute School of Public Health will follow the decision of the University. Call the University hotline at 202.994.5050 or check the Human Resources status button at <http://hr.gwu.edu/adverse-weather-conditions-and-emergency-situations>. In the event of class cancellation, we will email you about rescheduling, assignments due, etc.

### **Emergency Preparedness and Response Procedures**

The University has asked all faculty to inform students of these procedures, prepared by the GW Office of Public Safety and Emergency Management in collaboration with the Office of the Executive Vice President for Academic Affairs.

### **To Report an Emergency or Suspicious Activity**

Call the University Police Department at 202-994-6111 (Foggy Bottom) or 202-242-6111 (Mount Vernon).

### **Shelter in Place – General Guidance**

Although it is unlikely that we will ever need to shelter in place, it is helpful to know what to do just in case. No matter where you are, the basic steps of shelter in place will generally remain the same.

- If you are inside, stay where you are unless the building you are in is affected. If it is affected, you should evacuate. If you are outdoors, proceed into the closest building or follow instructions from emergency personnel on the scene.
- Locate an interior room to shelter inside. If possible, it should be above ground level and have the fewest number of windows. If sheltering in a room with windows, move away from the windows. If there is a large group of people inside a particular building, several rooms may be necessary.
- Shut and lock all windows (for a tighter seal) and close exterior doors.
- Turn off air conditioners, heaters, and fans. Close vents to ventilation systems as you are able. (University staff will turn off ventilation systems as quickly as possible).
- Make a list of the people with you and ask someone to call the list in to UPD so they know where you are sheltering and who is with you. If only students are present, one of the students should call in the list.
- Await further instructions. If possible, visit GW Campus Advisories for incident updates (<http://CampusAdvisories.gwu.edu>) or call the GW Information Line 202-994-5050.
- Make yourself comfortable and look after one other. You will get word as soon as it is safe to come out.

### **Evacuation**

An evacuation will be considered if the building we are in is affected or we must move to a location of greater safety. We will always evacuate if the fire alarm sounds. In the event of an evacuation, please gather your personal belongings quickly (purse, keys, GWorld card, etc.) and proceed to the nearest exit. Every classroom has a map at the door designating both the shortest egress and an alternate egress. Anyone who is physically unable to walk down the stairs should wait in the stairwell, *behind the closed doors*. Firemen will check the stairwells upon entering the building.

- Once you have evacuated the building, proceed to our primary rendezvous location: the courtyard area between the GW Hospital and Ross Hall. In the event that this location is unavailable, we will meet on the ground level of the Visitors Parking Garage (I Street entrance, at 22<sup>nd</sup> Street). From our rendezvous location, we will await instructions to re-enter the School.

### **Alert DC**

Alert DC provides free notification by e-mail or text message during an emergency. Visit GW Campus Advisories for a link and instructions on how to sign up for alerts pertaining to GW. If you receive an Alert DC notification during class, you are encouraged to share the information immediately.

### **GW Alert**

GW Alert provides popup notification to desktop and laptop computers during an emergency. In the event that we receive an alert to the computer in our classroom, we will follow the instructions given. You are also encouraged to download this application to your personal computer. Visit GW Campus Advisories to learn how.

### **Additional Information**

Additional information about emergency preparedness and response at GW or the University's operating status can be found on GW Campus Advisories (<http://CampusAdvisories.gwu.edu>) or by calling the GW Information Line at 202-994-5050.

### **Personal Support**

Counseling Center: The GW University Counseling Center offers a wide variety of counseling services to students including individual counseling, group counseling, academic support, career counseling, referral information, and alcohol/drug services. The Counseling Center is available to both undergraduate and graduate students. For more information: 2033 K Street, NW, #330, 202-994-5330, <http://gwired.gwu.edu/counsel/>. Information on other available resources is available on the GW website and in the SPH Student Handbook <http://publichealth.gwu.edu/services/students>.

<b>Session Outline</b>	
<b>Part I: Tools for Health Economists (Session 1-Session 4)</b>	
<b>Session 1</b>	<b>Monday, January 12</b>
<p><b>Introduction to Health Economics</b></p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> <li>• What is health economics?</li> <li>• The US vs. Developing Countries</li> <li>• Basic terminology</li> </ul> <p><i>Required Readings:</i></p> <p>FGS, Chapter 1</p> <p>Karlan, Dean "More Than Good Intentions: How a New Economics is Helping to Solve Global Poverty." Chapter 10: To Stay Healthy.</p> <p><b>In Class Documentary:</b> "The Name of the Disease" by Abhijit Banerjee, Arundhati Banerjee &amp; Bappa Sen.</p>	
<b>Session 2</b>	<b>Monday, January 26</b>
<p><b>Microeconomic Tools for Health Economics</b></p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> <li>• Supply and Demand</li> <li>• Economic tools used in health: includes asymmetric information, opportunity costs, discount rates, externality, public goods, elasticity and competitive markets</li> <li>• Scarcity and production possibilities frontier</li> <li>• Consumer Theory</li> <li>• Elasticity</li> <li>• Production and market supply</li> <li>• Competition</li> </ul> <p><i>Required Readings:</i></p> <p>FGS, Chapter 2</p> <p><b>Homework 1 Handed Out. Short assignment covering microeconomic tools. Due February 2</b></p>	
<b>Session 3</b>	<b>Monday, February 2</b>
<p><b>Statistical and Econometric Tools for Health Economics</b></p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> <li>• Review of regression analysis</li> <li>• Techniques for evaluating impact of policies and programs on health outcomes</li> </ul> <p><i>Required Readings:</i></p> <p>FGS, Chapter 3</p> <p>Baird, S., Freidman, J., and Schady, N. 2011. "Aggregate Income Shocks and Infant Mortality in the Developing World." The Review of Economics and Statistics, Vol. 93(3), pp. 847-856.</p>	

Miguel, Edward, and Michael Kremer. 2004. "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities." *Econometrica* 72 (1):159-217.

### **HOMEWORK 1 DUE**

#### **Session 4**

**Monday, February 9**

#### **Cost-Benefit Analysis and Valuing Health and Life**

*Topics:*

- Economic efficiency
- Cost-benefit analysis
- Cost-effectiveness analysis

*Required Readings:*

FGS, Chapter 4

Iqbal Dhaliwal, Esther Duflo, Rachel Glennerster, Caitlin Tulloch. 2012. "Comparative Cost-Effectiveness Analysis to Inform Policy in Developing Countries: A General Framework with Applications for Education Abdul Latif Jameel Poverty Action Lab (J-PAL), MIT.

Waters et al. 2011. "A Cost-Effectiveness Analysis of Alternative HIV Retesting Strategies in Sub-Saharan Africa." *J Acquir Immune Defic Syndr*, Vol. 56, pp. 443–452.

**Homework 2 Handed out. Covers statistical tools, cost effectiveness, and demand. Due March 16.**

#### **Part II: Demand and Production**

#### **Session 5**

**Monday, February 23**

#### **The Demand for Health and Health Capital**

FGS, Chapter 7

Ahuja, A., Baird, S., Hamory Hicks, J., Kremer, M. and Miguel, E. 2014. "When Should Governments Subsidize Health? The Case of Mass Deworming." *World Bank Economic Review Papers and Proceedings*, forthcoming.

Dupas, P. 2014. "Getting Essential Health Products to Their End Users: Subsidize, but How Much?" *Science*, Vol. 345, Issue 6202, pp. 1279-1281.

Grossman, M., 1972. On the concept of health capital and the demand for health. *Journal of Political Economy* 80, 223–255.

#### **Session 6**

**Monday, March 2**

#### **Policy Approaches to Increase Demand for Health (focus on Cash Transfers)**

Guest Speaker: Berk Özler, Senior Economist, The World Bank

Fiszbein, Ariel; Schady, Norbert; Ferreira, Francisco H. G.; Grosh, Margaret; Keleher, Niall; Olinto, Pedro; Skoufias, Emmanuel. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. Washington, DC: World Bank. Chapter 2.

Baird, S., McIntosh, C., Özler, B. 2011. "Cash or Condition?: Evidence from a Cash Transfer Experiment." *Quarterly Journal of Economics*, vol. 126, pp. 1709-1753.

Haushofer, J. and Shapiro, J. 2013. "Household Response to Income Changes: Evidence from an Unconditional Cash Transfer Program in Kenya." *Working Paper*.

**Session 7**

**Monday, March 16**

**Production of Health and Health Care**

*Required Readings:*

FGS, Chapter 5 and Chapter 6

Cutler, D and G Miller. 2005. "The Role of Public Health Improvements in Health Advances: The Twentieth-century United States." *Demography* 42(1):1-22.

**HOMEWORK 2 DUE**

**Part III: Healthcare Objectives and Financing**

**Session 8**

**Monday, March 23**

**Healthcare Financing Mechanisms**

*Topics:*

- What ways can you finance health care?
- Innovative solutions for financing health care.
- Policy responses for externalities/public goods

*Required Readings:*

FGS, Chapter 19

Eichler, Rena and Ruth Levine, 2010. Performance Incentives for Global Health: Potential and Pitfalls. Center for Global Development. Chapters 1 & 2.

Meessen et al. 2011. "Removing User Fees in the Health Sector: a review of policy processes in six sub-Saharan African countries." *Health Policy and Planning*. Vol. 26, pp. ii16-ii29.

Palmer, N., Mueller, D., Gilson L., Mills, A. and Haines, A. (2004) "Health financing to promote access in low income settings – how much do we know?" *Lancet*, 364, 1365-1370.

**Policy Brief Topic (one paragraph) Due**

**Session 9**

**Monday, March 30**

**Health Care Financing: Social Insurance**

Guest Speaker: Adam Wagstaff, Research Manager, The World Bank

*Topics:*

- Role of moral hazard, adverse selection and asymmetric information
- Social insurance policies and programs

*Required Readings:*

FGS, Chapter 21

Aviva A, Einav E, Finkelstein A (2013) The RAND Health Insurance Experiment, Three Decades Later. *The Journal of Economic Perspectives*. 27 (1): 197-222

**TBD**

**Session 10**

**Monday, April 6**

## Societal Objectives when it comes to Health and Health Care

### Topics:

- What is equity in health?
- Influence of income on health.

### Required Readings:

FGS, Chapter 18.

Wagstaff, A. and van Doorslaer, E. 2000. "Income inequality and health: what does the literature tell us?" *Annual Review of Public Health*. Vol. 21, pp. 543-567.

Marmot, M. 2002. "The influence of income on health: views of an epidemiologist." *Health Affairs*. Vol. 21, pp. 31-46.

**Midterm –One hour exam covering first seven session's material. First half of class.**

**Session 11**

**Monday, April 13**

### Health Care Financing: Pay for Performance

Guest Speaker: Jed Friedman, Senior Economist, The World Bank

### Required Readings:

Basinga, Paulin, et al. "Effect on maternal and child health services in Rwanda of payment to primary health-care providers for performance: an impact evaluation." *The Lancet* 377.9775 (2011): 1421-1428.

Savedoff, William D., and S. Partner. "Basic economics of results-based financing in health." *Results-Based Financing for Health*. Washington, DC: World Bank.

### Recommended Readings:

Magrath, Priscilla, and Mark Nichter. "Paying for performance and the social relations of health care provision: an anthropological perspective." *Social science & medicine* 75.10 (2012): 1778-1785.  
<http://www.sciencedirect.com/science/article/pii/S0277953612005667#>

Eijkenaar, Frank, et al. "Effects of pay for performance in health care: A systematic review of systematic reviews." *Health Policy* 110.2 (2013): 115-130.  
<http://www.sciencedirect.com/science/article/pii/S0168851013000183>

## Part IV: Special Topics and Presentations

**Session 12**

**Monday, April 20**

### Population Aging: Trends and Policy

Guest Speaker: John Giles, Senior Labor Economist, The World Bank

### Required Readings:

**TBD**

**Session 13**

**Monday, April 27**

### Economics of HIV/AIDS

Guest Speaker: Mead Over, Senior Fellow, Center for Global Development

*Required Readings:*

Over, M. and Garnett, G. 2011. *Treatment*. Copenhagen Consensus Center.

<http://www.cgdev.org/blog/how-would-you-spend-additional-10-billion-aids-africa-over-next-five-years>

<http://www.cgdev.org/blog/priorities-aids-spending-evaluating-interventions-individually-obscures-benefits-synergy>

Over, M. 2011. *Achieving an AIDS Transition: Preventing Infections to Sustain Treatment*. Center for Global Development (Chapter 2 required, but I strongly encourage you to read the entire thing).

*Recommended Readings:*

FGS, Chapter 25

**Session 14**

**Wednesday, April 29**

**CLASS PRESENTATIONS**

**POICY BRIEF DUE/FINAL DUE DATE FOR EVENT WRITE UPS**