

Economics 157 – Health Economics

Meetings: Tuesdays and Thursdays, 9:30-11 AM, 100 Lewis

This syllabus outlines in detail the policies and expectations for this course. “I didn’t read the syllabus” is not an acceptable excuse for overlooking an assignment, being late, or for not understanding any of the course policies.

Economics 157 is an advanced undergraduate course on the economics of health care provision and payment. In addition to being one of the most important “goods” consumed in our lives, health care spending accounts for approximately 20% of GDP in the United States. How we choose to provide and pay for health care has large direct welfare impacts on the consumers and producers of health care nationwide while also being key ingredients into overall national economic performance.

In this course we will use methods from microeconomics to investigate how different aspects of the health care system function and to assess the implications for different policies designed to improve that functioning. We will use economic tools and techniques from the sub-disciplines of information economics, industrial organization, labor economics, public economics, behavioral economics, and decision theory to think about these questions. The primary goals of the course will be to (i) master different economic techniques in the context of health care markets and (ii) learn about the specific institutional details and policies relevant to those markets.

Below are some key details and policies for the class. Please read this over in detail and ask immediately if you have any concerns or questions.

Professor’s Details /Office Hours:

Professor Ben Handel, 521 Evans Hall, 510-643-0708, email: handel@berkeley.edu
Drop in: Tuesdays 1-2 PM, 521 Evans
 Wednesdays 2-3 PM, 521 Evans

Prerequisites:

Economics 1 (Introduction to Microeconomics and Macroeconomics) is the only official prerequisite for this course. The course requires no prior knowledge of health care economics or institutions. The course will use rigorous quantitative analysis, including statistics and mathematical modeling, to study questions in health care economics, so you should feel comfortable with these tools before enrolling in the class. Non-economics majors who have only taken Economics 1 will likely find this course to be quite difficult.

Learning Goals:

As part of Berkeley's Undergraduate Student Learning Initiative (USLI), the Economics Department has developed learning goals for the Economics major.

See <http://econ.berkeley.edu/undergrad/home/learning-goals>. The specific learning goals which this course aims to achieve are:

- CT1. Understand everyday economic problems
- CT2. Use economic theory to understand and evaluate policy proposals
- CT3. Compare two or more arguments that have different conclusions to a specific issue or problem.
- CT4. Understand the role of assumptions in arguments.
- QT1. Understand how to use empirical evidence to evaluate an economic argument.
- QT2. Interpret statistical results.
- QT3. Conduct appropriate statistical analysis of data, and explain the statistical problems involved.
- PS2. Solve problems without clear solution.
- SP1. Specialized knowledge in fields.
- CS1. Communicate effectively in written, spoken, and graphical form about specific economic issues.
- CS2. Formulate a well-organized written argument that states assumptions and hypotheses, which are supported by evidence.
- LL3. Understand economic news.

Responsibilities and Requirements:

My responsibilities are to come to class prepared, respond to and encourage questions and other appropriate class participation, oversee grading of assignments and exams, be available during scheduled office hours, and to stimulate and enthusiasm for economics, health care, and for learning.

Your responsibilities are to attend lecture three hours per week, and participate in discussions in class. You should complete assigned readings *before class* each week, complete problem sets / writing assignments on time, and complete both midterm exams and a final exam.

Special Accommodations:

If you require special accommodations for exams due to a learning or other disability you must speak with Professor Handel no later than January 30. You will eventually need to obtain an evaluation form from Disabled Students' Program (230 César Chávez Student Center) but don't wait until then to visit with Professor Handel.

Course Website:

Course materials will be available on the course website on BCourses. The course website is: <https://bcourses.berkeley.edu/courses/1196259>

In addition to serving as a centralized location for all course materials, the course site will be used for submission of some assignments and for dissemination of grades.

Required Textbooks:

Health Economics, Jay Battacharya, Timothy Hyde, and Peter Tu, 1st Edition, Palgrave Macmillan, 2014.

Health Care Reform: What It Is, Why It's Necessary, How It Works, Jonathan Gruber, 2012.

Optional Books:

For those looking for additional textbooks to supplement the main readings you may wish to read:

Your Money or Your Life: Strong Medicine for the American Health Care System. David Cutler, 2005.

Code Red. David Dranove, 2008.

Required Other Materials:

Purchase of an i>clicker. You may buy any version (available at bookstore). These will be used in class for interactive exercises and to facilitate class participation. For example, most lectures will include questions for the class, designed to facilitate discussion, that students will use the i>clicker to answer. Note: if you prefer, and it doesn't inhibit your use, you can also use i>clickerGO on your laptop / iPad.

Health Economics News and Blogs:

The Morning Consult

<http://themorningconsult.com/>

The Incidental Economist

<http://theincidentaleconomist.com/>

The Health Care Blog

<http://thehealthcareblog.com/blog/tag/economics/>

The Health Care Economist

<http://healthcare-economist.com/>

Course Assignments and Grading:

There are 500 possible points for the semester. Your grade will depend on the following assignments, with points indicated in parentheses:

Non-Exam Assignments

Analytical Policy Write-Ups

40 points (2 @ 20 points each)

Problem Sets

60 points (3 @ 20 points each)

Maximum points for non-exam assignments

100 points

Exams

Midterm # 1 (February 25 in class)	100 points
Midterm # 2 (April 10 in class)	100 points
Final Exam (May 14, 11:30 AM)	<u>200 points</u>

Maximum points for exams 400 points

Exam Details and Policies:

In-class exams will be held on Tuesday, February 25 and Thursday, April 10 during the lecture period. The exam will cover material presented in class as well as material from the assigned readings. All exams are closed book and closed note exams. Questions will be similar to those given on the problem sets, and can be either quantitative, qualitative, or graphical in nature. There will be no true / false or multiple choice questions. Professor Handel will provide more exact detail on each exam one week before the exam is actually conducted. The material in each of these midterms will be drawn from the relevant preceding five week period in class.

The final exam will be administered during the final exam period, on May 14 at 11:30 AM. This exam will emphasize material covered in class after the second midterm, but will also contain material from prior to that midterm. As with each midterm, more details on the exact nature of questions to expect will be given in advance of the final exam.

No make-up exams are scheduled. If you miss an exam you must contact Professor Handel immediately via email and explain why you missed the exam. Without an exceptional cause for missing the exam you will receive a zero. It is unfair to other students in the class who take the exam to miss an exam and expect to be able to retake it, unless the reason is truly exceptional.

Finally, in the event someone pulls a fire alarm during the exam (which apparently happens sometimes, despite the fact that it's a criminal offense to do it falsely!) we'll take the exam outside and continue taking it outside.

Non-Exam Assignment Details and Policies:

Participation: One goal will be to encourage discussion on key questions and topics in class. With such a large class, I won't be judging people negatively for not participating, or keeping track in any formal way, but I will notice those who consistently participate and give them up to 20 "bonus" participation points.

Analytical Policy Write-Ups: Two times during the semester you will be asked to write a 2-3 page essay based on health economics news / policy you read, either from one of the news / blogs cited in this syllabus or from another valid source. The purpose of this essay is to get each of you to engage with a current health policy issue through online health economics resources. You will either compare and contrast two or more articles / blog posts on the same general health economics topic, or do a more in depth economic analysis of one article / blog post. More detail, and a template, will

be provided at the time each write-up is officially assigned. Relevant dates for these essays are included in the course outline at the end of this syllabus.

Problem Sets: Three problem sets will be given during the semester to help you understand the economic tools and techniques used to study health care. The problem sets will contain mostly quantitative and graphical exercises. The problem sets will build on the material discussed in class and in the readings. You can talk about the problem sets and your answers with others in the class, but must turn in your own answers (which can't be copied directly from someone else). More details will be given with each problem set as it is assigned. Relevant dates for problem sets are included in the course outline at the end of this syllabus.

Academic Honesty Policy:

In fairness to students who put in honest effort, cheaters will be harshly treated. Any form of cheating whatsoever will result in a zero on the assignment or exam, and possible additional action. Cheating includes, but is not limited to bringing / using unsanctioned notes or written materials in an exam, copying off another's exam, allowing someone to copy off your exam on purpose, and having someone take an exam for you.

Since I will seek to encourage some collaboration on all non-exam assignments, as long as each student writes up his / her assignment in his / her own words discussion with other students is ok, and even encouraged. Of course, any source (book, blog, article) should be properly cited in all assignments where this is a relevant concern. Plagiarism without a clear citation will not be tolerated, and a zero will be given for the assignment with possibly further consequences.

To summarize: don't cheat.

Finally, you should include the Berkeley student honor code on all exams and assignments:

"As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others."

Graders:

Katalin Springel, kspringel@econ.berkeley.edu

Emiliano Huet-Vaughn Emiliano@econ.berkeley.edu

Gregory Lane gvplane@gmail.com

Course Outline and Reading Assignments

Week 1:

1/21 – Course Overview

1/23 – Demand for Health and Health Care

Battacharya, Chapters 1-2

Week 2:

1/28 – Demand for Health and Health Care: The Grossman Model

Battacharya, Chapter 3

Gawande, A. “The Cost Conundrum” *The New Yorker*, June 2009.

http://www.newyorker.com/reporting/2009/06/01/090601fa_fact_gawande

Note: First analytical policy write-up assignment given out.

1/30 – Demand for Insurance: Expected Utility

Battacharya, Chapter 7

Week 3:

2/4 – Demand for Insurance: Information, Complexity, and Decision-Making

Berkeley Benefits Guide

Berkeley Health Insurance Choice Portal

<http://atyourservice.ucop.edu/oe/medical/index.html>

Read introduction:

Abaluck, J. and Gruber, J. “Choice Inconsistencies among the Elderly: Evidence from Plan Choice in the Medicare Part D Program,” *American Economic Review*, June 2011, 1180-1210.

Read introduction:

Handel, B. and Kolstad, J. “Health Insurance for Humans,” UC Berkeley working paper.

2/6 – Adverse Selection: Akerlof Model

Battacharya, Chapter 8

Note: First analytical policy write-up assignment due.

Note: First problem set given out.

Week 4:

2/11 – Adverse Selection: Graphical Analysis

Einav, L. and A. Finkelstein, “Selection in Insurance Markets: Theory and Empirics in Pictures” *Journal of Economic Perspectives*, 2011, 25(1): 115-138.

Battacharya, Chapter 9 Section 11 only

2/13 – Adverse Selection in Practice

Battacharya, Chapter 10

Read pages 433-444 and conclusion:

Cutler, D. and Reber, S. “Paying for Health Insurance: The Trade-Off between Competition and Adverse Selection,” *Quarterly Journal of Economics*, 1998, 433-466.

Read Introduction and Conclusion:

Handel, B. “Adverse Selection and Inertia in Health Insurance Markets: When Nudging Hurts,” *American Economic Review*, December 2013, 2643-2682.

Week 5:

2/18 – Moral Hazard

Battacharya, Chapter 11

Gladwell, M. “The Moral Hazard Myth,” *The New Yorker*, August 29, 2005.

http://www.newyorker.com/archive/2005/08/29/050829fa_fact

Note: First problem set due.

2/20 – The American Model

Battacharya, Chapter 18

Week 6:

2/25 – Exam # 1 on all course material through 2/18

2/27 – The Affordable Care Act: Part I

Chapters 1-6:

Gruber, J. Health Care Reform: What It Is, Why It's Necessary, How It Works. 2012.

Kaiser Family Foundation: Summary of the Affordable Care Act

Cutler, D. “The Simple Economics of Health Reform,” *The Economists’ Voice*, December 2010.

Optional:

Gruber, J. “Covering the Uninsured in the United States,” *Journal of Economic Perspectives*, 46(3): 571-606.

Week 7:

3/4 – The Affordable Care Act: Part II

Chapters 7-12:

Gruber, J. Health Care Reform: What It Is, Why It's Necessary, How It Works. 2012.

30 Economists: We Need the Individual Mandate

<http://www.healthinsurance.org/blog/2013/07/18/30-economists-we-need-the-individual-mandate/>

Health Affairs Health Policy Brief: Risk Adjustment in Health Insurance. August, 2012.

“Young, Fit, and Uninterested,” *The Economist*, January 2014.

<http://www.economist.com/news/united-states/21594300-was-supposed-be-month-uninsured-got-health-insurance-not-enough?zid=318&ah=ac379c09c1c3fb67e0e8fd1964d5247f>

3/6 – The Affordable Care Act: Part III

“The Case Against Obamacare,” Heritage Foundation, 2011. Read the following:

- Obamacare and the Individual Mandate
- Obamacare and New Taxes
- Obamacare and the Employer Mandate
- Obamacare and Insurance Rating Rules
- Obamacare and the Hidden Public Option
- Obamacare and the Independent Payment Advisory Board

Kleinke, J.D. “The Conservative Case for Obamacare,” *New York Times*, September 2012.

<http://www.nytimes.com/2012/09/30/opinion/sunday/why-obamacare-is-a-conservatives-dream.html?pagewanted=all>

Cutler, D. "The Economics of the Affordable Care Act," New York Times, August, 2013.
http://economix.blogs.nytimes.com/2013/08/07/the-economics-of-the-affordable-care-act/?_php=true&_type=blogs&_r=0

Nowak, S. and Eibner, C. and Adamson, D. and Saltzman, E. "Effects of the Affordable Care Act on Consumer Health Spending and Risks of Catastrophic Health Costs," *RAND Corporation*, 2013.

Note: Second problem set given out.

Week 8:

3/11 – Delivery of Health Care: The Labor Market for Physicians

Battacharya Chapter 5

3/13 – Delivery of Health Care: The Hospital Industry

Battacharya, Chapter 6

Week 9:

3/18 – Why are Costs so High? Technology Growth and Innovation

Battacharya Chapter 13

Read introduction:

Cutler, D. and M. McClellan. "Is Technological Change Worth It?" *Health Affairs* Sept/Oct. 2001.

Note: Second problem set due.

3/20 – Why are Costs so High? Technology Growth and Innovation

Chandra, A. and Skinner, J. "Technology Growth and Expenditure Growth in Health Care," NBER Working paper no. 16953, April 2011.

Week 10:

4/1 – Why are Costs so High? Population Aging

Battacharya, Chapter 19

4/3 – Why are Costs so High? Organizational Management and Efficiency

Gawande, A. “Big Med” *New Yorker*, August 2012.

http://www.newyorker.com/reporting/2012/08/13/120813fa_fact_gawande

Cutler, D. “Where are the Health Care Entrepreneurs? The Failure of Organizational Innovation in Health Care,” NBER working paper no. 16030, May, 2010.

Week 11:

4/8 – Why are Costs so High? Physician Decision Making

Gawande, A. “The Checklist” *New Yorker*, May 2010.

http://www.newyorker.com/reporting/2007/12/10/071210fa_fact_gawande

4/10 – Exam # 2 on material from 2/20 to 4/3

Note: Second analytical policy write-up given out.

Week 12:

4/15 – Pharmaceutical Markets and Innovation

Battacharya, Chapter 12 through Section 12.3

4/17 – Pharmaceutical Markets and Innovation

Battacharya, Chapter 12 after Section 12.3

Lakdawalla, D. et al. “U.S. Pharmaceutical Policy in a Global Marketplace,” *Health Affairs*, 2009.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3804349/?report=reader>

Note: Second analytical policy write-up due.

Note: Third problem set given out.

Week 13:

4/22 – International Health Care Systems and Alternative Designs

Battacharya, Chapters 15

4/24 – International Health Care Systems and Alternative Designs

Battacharya, Chapter 16-17

Week 14:

4/29 – International Health Care Systems and Comparisons to U.S.

Cutler, D. and Ly, D. “The (Paper) Work of Medicine: Understanding International Medical Costs,” *Journal of Economic Perspectives*, 2011.

“The U.S. Health System in Perspective: A Comparison of Twelve Industrialized Nations,” *The Commonwealth Fund*, July 2011.

Note: Third problem set due.

5/1 – Course Wrap-Up: Health Economics and Policy: Past, Present, and Future

Final Exam:

Wednesday, May 14th at 11:30 AM