Syllabus

The purpose of this course is to extend students’ understanding of economic theory and empirical research in key areas of health economics and enable students to leverage that knowledge and apply it to timely issues in health policy and management.

**Academic Integrity:** Students are reminded that they have signed an Academic Oath at NYU Wagner and they are bound by this oath and the principles of the academic code of the school. More details can be found here: http://wagner.nyu.edu/current/policies/

**Late Assignment Policy:** Extensions will be granted only in case of emergency, out of respect to those who abide by deadlines despite equally hectic schedules. Late submissions without extensions will be penalized 10% per 24-hour period.

**Students with disabilities:** Any students requiring accommodations should contact me to make proper arrangements. Please be prepared to share your documentation from the NYU disabilities office regarding appropriate accommodations.

**Prerequisites:** Microeconomics, Statistics I. Proficiency in Excel expected.

**Requirements:**
- Please do all required readings before class and be prepared to discuss the policy reading assigned each week.
- Assignments (75% of grade – 35%, 25%, 15%)
- Final exam – (25% of grade) – online – week of March 7

**Required Text:**

<table>
<thead>
<tr>
<th>Title</th>
<th>Health Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authors</td>
<td>Jay Bhattacharya, Peter Tu, Timothy Hyde</td>
</tr>
<tr>
<td>Publisher</td>
<td>Palgrave Macmillan, 2013</td>
</tr>
<tr>
<td>ISBN</td>
<td>113702996X, 9781137029966</td>
</tr>
</tbody>
</table>

**Assignments:** All papers are to be submitted via the NYU Classes course site before the start of class on their due date. *Be sure your name is part of the document file name.*
Competencies and Grades:

Assignments and tests in this course will be used to assess progress against the competencies listed below. No student will receive a B or higher without demonstrating satisfactory progress toward mastery of each competency. The level of competency expected to be achieved is denoted in brackets according to the following key:

[1] = Basic: Foundational understanding of knowledge/skill/competency
[2] = Intermediate: Student demonstrates greater depth of understanding of this knowledge/skill/competency and can use this ability to analyze a problem
[3] = Advanced: Student demonstrates expertise in this knowledge/skill/competency and can use this ability to evaluate, judge, and synthesize information

- The ability to understand how policy and delivery processes work, and to consider the demographic, cultural, political and regulatory factors involved in and influencing health policy and management decision-making. (A1, T) [2]
- The ability to synthesize evidence, and apply statistical financial, economic and cost-effectiveness tools/techniques in organizational analysis. (A1, A2, A3, T) [3]
- The ability to present convincingly to individuals and groups the evidence to support a point of view, position or recommendation. (A1, A3, T) [2]
- The ability to communicate and interact productively (via listening, speaking and writing) on matters of healthcare with a diverse and changing industry, workforce and citizenry. (A1, A3) [2]

Grading:

Assignments 1 and 2 will ask you to examine a policy/management issue and to use data to support your answer. Each paper will be graded out of 50. In your response, you should:

1. Compose a clear, coherent, concise argument [20 points]
2. Apply theories learned in class [10 points]
3. Relate your analysis to at least one idea mentioned in the readings [5 points]
4. Analyze data accurately [5 points]
5. Use data to support your argument [10 points]
Session 1: January 25, 2015

Demand for Health, Health Production
Objectives:
- Understand how economic models can be used to structure thinking around health policy issues
- Be able to use Grossman’s model of the production of health to analyze issues
- Become familiar with the literature on the relationship between income and health
- Learn approaches to addressing causal inference

[Textbook discussion of Grossman model matches mine, but with more graphs p. 28-46] Text Chapters 1, 3, 4


Policy Issue Income and life expectancy


Assignment 1--Due before the start of class on February 1st: Use Grossman’s model of the production of health to evaluate how NYC’s new sick leave law is likely to affect emergency room use. Use the articles and data on the course site to provide evidence in support of your hypothesis.

Tips:
(a) Be concise! Don’t throw in extra information

(b) There are (at least) three ways that sick leave could affect the use of emergency rooms. Be sure to explain all of them and note and explain why one of these is likely more important than the others. The Policy will change the cost of time spent sick, the cost of certain preventive care (delivered by a doctor), and the cost of certain kinds of care received when you are sick (which?). Remember that not all prevention requires doctors and that not all illness can be prevented. Consider all the cases in your thinking.
(c) Do not use graphs or letters to describe the Grossman model. Do all the work in your own words and in terms sensible for a layperson. Imagine that you are writing to the mayor or to the chair of an emergency department. Use Grossman’s model to inform your own thinking - but your audience won’t want to see the algebra.

(d) In doing the data analysis, be sure to use the right denominator.

**Session 2: February 1, 2015 – Assignment 1 due before class starts**

*Infectious disease, Externalities*

Objectives:
- Become familiar with the problems of externalities in health
- Understand basic models of infectious disease transmission
- Learn to apply the Coase theorem

Text Chapters 20-21

[Textbook discussion on externalities, Coase theorem very similar to class discussion p.428-440
Textbook discussion on economic epidemiology very similar to class discussion p. 449-456. Laxminarayan chapter in readings is also very good on this.]


Policy Issue: Hospital Management of Antibiotics
http://online.wsj.com/articles/SB10001424052702304585004579419493198620498

**Session 3: February 8, 2015**

*Distribution of health spending/Demand for insurance/adverse selection*

Objectives:
- Understand the sources of demand for health insurance
- Be able to apply the idea of utility maximization to potential states of the world
- Understand the idea of a separating equilibrium

Text Chapters 7, 8, 9, 10

[Textbook discusses demand for insurance p. 126-233 – a little more notation than I used, but graphs are the same as are concepts
Textbook does the same adverse selection model, but uses a somewhat different notation – p. 170-178. Pages 1-5 in the Cutler and Zeckhauser article lay out the theory]
and implications of selection among plans. It discusses the Cochrane lifetime contract at p. 179]


Policy Issue: Voluntary Insurance


Assignment 1b will be handed out and is due February 15th before the start of class.

Session 4: February 15, 2015 – Assignment 1b due before the start of class.

Adverse selection continued/moral hazard
Objectives:
- Understand strategies for addressing adverse selection
- Be familiar with the model of efficient moral hazard

Text Chapters 2, 11


Policy Issue: Responding to Adverse Selection
http://www.nuffieldtrust.org.uk/talks/videos/wynand-van-de-ven-use-risk-adjustment-netherlands [home page and first 5 minutes]


Session 5: February 22, 2015

Moral Hazard-What Services Should Health Insurance Cover?
Objectives:
- Understand the use of randomized experiments in health economics
- Recognize the welfare losses associated with moral hazard
Text Chapters 2, 11
P. 774-777 in the article by Glied and Remler cover the complete contingent claims approach  
Manning et al. describes the RAND experiment and provides results.  
Pauly p. 639-641 gives an overview of the tax treatment issues.]


Policy issues: Mental Health Parity and User Fees

Waiswa, WP. The impact of user fees on access to health services in low- and middle-income countries.  
http://apps.who.int/rhl/effective_practice_and_organizing_charge/cd009094_waiswaw_com/en/

**Assignment 2: dental coverage – due on February 29th before the beginning of class.**  
Write a 2-3 page memorandum recommending whether (and what type) dental coverage should be included in an essential health benefits requirement for adults. That means that every health insurance plan will be mandated to include the dental benefit – there will be no choice about whether to buy it or not. In developing your recommendation, consider the price elasticity of demand for health insurance as well as the other theories discussed in class. The excel spreadsheet on the course site contains information on dental coverage and utilization from the 2011 Medical Expenditure Panel Survey. Use these data to buttress your argument.

You should not need to read anything except assigned readings and textbook. Do not do additional research. Types of dental coverage you might consider include preventive, restorative, catastrophic, orthodontic etc. and low or high cost-sharing or deductibles. Or invent a benefit. Here's a description of the NYU Faculty Dental benefit, to give you a sense of the kind of thing you might invent:

<table>
<thead>
<tr>
<th>Coverage Type</th>
<th>Plan Covers</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE A: Diagnostic and Preventive</td>
<td>100%*</td>
</tr>
<tr>
<td>- Routine oral exams, cleanings, fluoride treatments, X-rays, space maintainers</td>
<td></td>
</tr>
<tr>
<td>- One application of sealant every five years (restricted to non-restored/non-decayed first and second molars, dependent children up to age 99)</td>
<td></td>
</tr>
<tr>
<td>TYPE B: Basic Restorative</td>
<td>80%*</td>
</tr>
<tr>
<td>- Fillings, simple extractions, crowns, dentures and bridge repairs, endodontics (root canal), oral surgery, periodontics</td>
<td></td>
</tr>
<tr>
<td>TYPE C: Major Restorative</td>
<td>50%*</td>
</tr>
<tr>
<td>- Bridges and dentures, crowns, inlays, and onlays</td>
<td></td>
</tr>
<tr>
<td>- Temporomandibular Joint Syndrome (TMJ)</td>
<td></td>
</tr>
<tr>
<td>TYPE D: Orthodontia (per person)</td>
<td>50%*</td>
</tr>
</tbody>
</table>
| Annual Deductible       | - Individual: $50  
| - Family: $150  |
| Annual Maximum Benefit  | $2,000 per person  
| Orthodontia Lifetime Maximum | $1,500  
| Periodontal Lifetime Maximum | $2,500  
| TMJ Lifetime Maximum    | $1,500  |
Session 6: February 29, 2015 - Assignment 2 due before start of class, Assignment 3 handed out

Watch all videos before class!!!

Economic Evaluation of Health Interventions
Objectives:
- Understand the basic methods of economic evaluation of health interventions
- Recognize the difference between cost-saving and cost-effective
- Be able to discuss the problems of cost-effectiveness analysis

Text Chapter 14
[Textbook cost-effectiveness – focus on p. 278-282, 285-292. The readings are likely to be more useful than the textbook.]

Five-Part Webcast on Economic Evaluation:
http://www.cdc.gov/dhdsp/programs/nhdsp_program/economic_evaluation/

Policy issue: Sovaldi

Assignment 3: Cost effectiveness analysis assignment. You may do this assignment in groups of up to 3 people. Due date: March 7th before start of class.

Session 7: March 7, 2015 - Assignment 3 due before the start of class.

Agency – How Should Health Professionals be Paid?
Objectives:
- Understand the problem of agency and its application to health care
- Recognize the different ways of compensating health care providers and the incentives these generate

Text Chapter 5
[The textbook does not give a good overview of agency issues. The Christianson and Conrad book chapter will help and Ellis and McGuire gives a good overview of demand and supply cost-sharing.]


Policy issue: