

# PH 255: Health Economics

3 Credits

Prerequisites: N/A

Spring 2023

*Tuesdays 5:30m-8:30 pm, Jaharis 118*

## Course Director

Wenhui Feng PhD MPP

Tufts Health Plan Professor of Health Care Policy Research

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Preferred Pronouns: She/Her/Hers

Contact information:

Best way to find me: [Wenhui.Feng@tufts.edu](mailto:Wenhui.Feng@tufts.edu)

I typically response to emails within 24 hours during workdays. Emails that came during the weekend will be responded by Monday.

## Teaching Assistant

Preston Dang, B.S

Preferred pronouns: He/Him/His

Contact information: [preston.dang@tufts.edu](mailto:preston.dang@tufts.edu), I typically response to emails in 1-2 business days.

## Office Hours

I am always happy to meet with you during my office hours. You can come by on your own, in pairs, or even small groups. Students come to my office hours for all kinds of reasons, including:

- Ask questions or for more information about course material
- Share ideas about projects and assignments
- Get advice about completing assignments
- Talk about other issues related to the class (e.g. “How can I improve participation?”)
- Talk about issues affecting your performance in class (e.g. “My family member is sick and I am stressed out, is there anything we can do about this?” Or “I am juggling work and school and am wondering about advice to make sure I complete the class.”)

- Discuss disability accommodations (make sure you do this early in the semester)
- Ask questions about the major or minor
- Just say hi!

You can come to my office (M&V 127) without an appointment Tuesdays, 11am-12pm. If you want to see me outside of this time or setting up a meeting over zoom. You can make an appointment using this link:

<https://calendly.com/wenhuifeng/30min>

## Course Description

We don't get to have everything we want. That basic truism applies to people and to firms - and it applies even more so to healthcare issues. We have some resources - time, materials, talent, factories, energy, land, etc. - and we have some things we'd like - health care services, public health infrastructure, medical research, etc. People differ in what sorts of goods and services they value most, and in their wealth and health. Some organizations are better than others at transforming inputs into things we'd like. Throughout most of the world today, markets play a key role in deciding what goods and services get produced, who produces them, and who consumes them. Few issues resonate in health policy debates as deeply as the question of how well markets serve these roles. PH 255 investigates how markets serve these roles, the efficiency and social justice implications of market operations, and the primary rationales for health policy interventions.

## Course Learning Objectives

By the end of this course, students will be able to:

- Apply microeconomic concepts to analyze simple economics issues.
- Interpret graphical representations of microeconomic principles of health economics.
- Describe key economic issues that are part of the US health policy discussion, including the healthcare and healthcare reform.
- Explain how key factors affect the issues above.

## Competency Chart and Statement

This is a required course for Health Services Management & Policy concentration in the Tufts MPH program. This course delivers concentration competencies required for the MPH degree. To pass this course, you must successfully complete each competency-based assignment. If you do not get a passing grade on the competency-based assignment, please arrange to meet with me to discuss next steps so we can ensure you attain the competency.

| Competency  | Sessions Where Competency is Taught | Competency Assessment |
|---|-------------------------------------|-----------------------|
| Apply economic theory to health care services and systems | Session 1-14                        | Analytical Memos      |

## Required Textbooks and Materials

This course does not have a required textbook. Assigned readings are available on Canvas. If you want to increase the knowledge in health economics. The following textbook provides a helpful background:

Santerre, R. E., & Neun, S. P. (2013). Health economics: Theory, insights, and industry studies (6th ed., Upper Level Economics Titles). Mason, OH: South-Western Cengage Learning.

There is one hard copy on reserve in the Hirst Library.

## Expectations, Values, and Climate

- I want us to collectively create a supportive, inclusive, and positive learning environment for this course. I look forward to learning from all of you and I expect you to come to class prepared to learn and engage in a respectful and thoughtful way.
- I expect that students arrive to class on time and attend all class sessions. If you will not be able to attend class for any reason, please notify me in advance. This course is cumulative, three missing classes will make it very difficult for you to successfully pass the class, and will result in a default failure of the course that can be mediated by discussing options with the faculty. If you have/are anticipating missing three or more classes during the semester, come to discuss

with the faculty to seek a satisfactory mediation. Possible approaches include:

- Identify a classmate that helps you zoom into class. This course relies heavily on in-class activities. Zooming into class may not be the most effective way to learn, but can be a good way to catch up.
- Review slides, try to work on the materials on your own, and go to office hours to ensure you did not miss important points.
- All course wide communications will be sent out via Canvas. Make sure your Canvas notifications are enabled so that you get emails when an announcement is distributed.
- Students should complete assigned pre-work and readings prior to class and come ready to engage deeply in the material. In-class time will be more useful if students are ready and willing to participate actively.

## Assignment and Assessment Information

| Assignment Title | Due  | % of Total Course Grade |
|------------------|------|-------------------------|
| Problem Set 1    | 1/31 | 6% *                    |
| Problem Set 2    | 2/7  | 6% *                    |
| Problem Set 3    | 2/14 | 6% *                    |
| Problem Set 4    | 2/21 | 6% *                    |
| Midterm Exam     | 3/7  | 20%                     |
| Memo 1           | 3/14 | 7%                      |
| Problem Set 5    | 3/28 | 6% *                    |
| Problem Set 6    | 4/4  | 6% *                    |
| Memo 2           | 4/1  | 7%                      |
| Problem Set 7    | 4/18 | 6% *                    |
| Final Exam       | 5/2  | 20%                     |
| Peer Evaluation  | 4/25 | 5%                      |
| Engagement       | N/A  | 5%                      |
| Total            |      | 100%                    |

\*Lowest grade in problem sets will be dropped.

## Assignment Details

### Problem Sets (6% each, 36% total)

For this course, you will improve your problem-solving skills in problem sets. These are important tools to evaluate your knowledge or skills so that we can address any problem as soon as possible. Because the knowledge in this course is accumulative, we will conduct this evaluation throughout the semester.

Opportunity to grow: I would like to give you the opportunity to make errors and improve through the course without being punished. At the end of the semester, your lowest grade out of the problem sets will be automatically dropped. Six problem set grades will be counted towards the final grade.

Problem Sets are due on paper at the beginning of the class. Our class will have a fair amount of computations and drawing figures, which some may prefer to do by handwriting. You may type or write directly on paper as much or little as you want.

### Analytical Memos (7% each, 14% total)

You will notice some of the analyses in this course are qualitative-driven. For those analyses, you will be assessed on how well you articulate the concepts and how effective you can make arguments using the analytical tools we covered in this course. Those assessments are in the form of analytical memos.

You may have practiced memo writing in other courses. For this course, we follow a standard memo format. If you need a refresher, see [Purdue's guidance on format and elements to be included](#). Specifically, we will practice making clear arguments with limited space. All memos are limited to two pages. We will discuss more on memo formats in Session 6.

Memos are due in Canvas at the beginning of the class.

### Midterm and Final Exams (20% each, 40% total)

There will be two timed exams in this course. The exams will ask you to work on problems and answer questions that build on in-class activities, problem sets, and memos.

### Peer Evaluation (5% )

No free riders in this class! Your peers will evaluate your performance throughout the semester. See below for the grading rubric for team performance.

Name:

Group Name:

Please rate each group member (including yourself) from 0 to 20 (with 20 as the highest score and 1 the lowest)

| Name          | Name # 1 | Name # 2 | Name # 3 | Name # 4 | Name # 5 |
|---------------|----------|----------|----------|----------|----------|
| Attendance    |          |          |          |          |          |
| Share of Work |          |          |          |          |          |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| Quality of Work  |  |  |  |  |  |
| Willingness to help teach or learn from each other               |  |  |  |  |  |
| Collegiality (respect team members, adhere to group's deadlines) |  |  |  |  |  |
| Total Score (0-100)  |  |  |  |  |  |

How would you rate the Group Experience over all:

Any additional comments:

**Engagement ( 5% )**

See below for the grading rubric for engagement.

Simply attending class is not active engagement. It is expected that all students will attend every class session and actively engage in this course. If you need to miss a class, you should notify the instructors prior to that class session. Engagement can take a variety of forms, including asking questions or offering a comment to the full class or small group, and reflecting on class material in written form in class. Active engagement in this course is about more than simply how many times you speak up in class.

Why is active engagement important?

Part of the learning that happens in graduate school comes from engaging with your peers and challenging your previously held assumptions. As instructors, we also learn from the diverse perspectives of the students in this course. We hope that this course provides an opportunity for you to engage thoughtfully and critically in an inclusive and constructive environment.

**RUBRIC**

|           | Exemplary (20)  | Proficient (18-19)  | Developing (16-17)  | Beginning (0-15)   |
|-----------|---|---|---|--|
| Quality   | Comments are consistently responsive to the topic and move the discussion forward and/or offer a different perspective. | Comments are often responsive to the topic and engage with the course material. | Comments aim to be responsive to the topic, but sometimes take the discussion off course. | Comments are often unrelated or disruptive to the topic, and/or take the conversation off track. |
| Frequency | Comment in the large group sessions several times each week and do not  | Comment at least weekly in the large group discussion and do not dominate       | Comment every other week in the large group discussion and/or regularly                   | Comment less than every other week, and/or regularly dominate the                                |

|                         |   |   |  |   |
|-------------------------|---|---|--|---|
|                         | dominate the discussion. Actively participate in small group work.  | the discussion. Participate consistently in small group work.   | dominate the discussion. Participate moderately in the small group work.   | discussion. Participate very minimally or not at all in small group discussions.  |
| Critical Thinking       | Comments consistently reflect a thoughtful analysis and/or synthesis across readings and discussion.  | Comments often provide additional insights drawing on readings and discussion, but not always.  | Comments often only summarize or restate readings or discussion materials or are not well-linked to class materials, without offering new insights.  | Comments show limited or no engagement with course materials and discussion insights.   |
| Respect                 | Comments show respect to peers and faculty by appropriately challenging assumptions and demonstrating mutual respect.   | Comments reasonably highlight perspectives and assumptions, showing understanding of peer and faculty perspectives.   | Comments are occasionally dismissive or disrespectful, showing a lack of awareness for how they may impact others.   | Comments are consistently dismissive or disrespectful, showing a lack of mutual understanding and respect.  |
| Presence and Attendance | Distracting devices (e.g., phones, computers, tablets) are always set aside unless they are a necessary component of the course activities. Attend all class sessions on time, with no more than one excused absence. | Distracting devices (e.g., phones, computers, tablets) are mostly set aside unless they are a necessary component of the course activities. Attend all class sessions mostly on time, with no more than two excused absences. | Distracting devices (e.g., phones, computers, tablets) are frequently used during class for texting, emailing, browsing Facebook, or online shopping. Three excused absences, and/or often arriving late to class. | Clear, consistent, and disrespectful unrelated multitasking throughout the class session. Missing more than three classes and/or not notifying the instructor of two or more absences in advance. |

## MPH Program Guidelines and Academic Resources

### Grade Chart

| Grade | Numerical Equivalent | Brief Descriptor | Expanded description   |
|-------|----------------------|------------------|--|
| A +   | 97 and above         | Outstanding      | Exceptional work that is of the highest academic or professional quality.  |
| A     | 94 – 96              | Excellent        | Superior work of distinction that fully meets academic or professional expectations.   |
| A -   | 90-93                | Very Good        | High quality work that demonstrates robust understanding and application of course material.                                   |
| B +   | 87-89                | Good             | Work that demonstrates understanding and application of course material.   |
| B     | 83-86                | Acceptable       | Work that demonstrates basic understanding and application of course material.   |
| B -   | 80-82                | Fair             | Minimally acceptable work that shows basic understanding of course material and a developing understanding of its application. |
| C +   | 77-79                | Unsatisfactory   | Work that does not yet demonstrate understanding of course material or its application.  |
| C     | 70-76                | Unsatisfactory   |  |
| D     | 60-69                | Unsatisfactory   |  |
| F     | 0-59                 | Unsatisfactory   |  |
| S     | 80 and above         | Satisfactory     | Work that demonstrates at least minimally acceptable understanding of course material and its application.                     |
| U     | 79 and below         | Unsatisfactory   | Work that does not yet demonstrate understanding of course material or its application.  |

### Tufts Public Health Anti-Racism, Diversity, and Inclusion Statement

The Tufts Public Health Program is committed to diversity, equity, and inclusion, which includes anti-racist teaching and practice. We believe that racism is a public health problem, and public health professionals should be engaged in efforts to address the racist and unjust structures, systems, and policies that foster inequitable access to resources and ultimately health. We strive to create a classroom environment where biases, discrimination, and



inequities are named and interrogated, so that they can be acted upon. We are part of the Tufts University School of Medicine's strategic plan to transform into an anti-racist institution and to achieve inclusive excellence. We recognize this is a collaborative process, which requires an ongoing commitment, humility, and a willingness to grow and learn together.

## Academic Integrity Statement

Students are expected to abide by all policies in the PHPD Student Handbook that address Standards of Academic and Professional Conduct, which includes a commitment to academic integrity. As faculty, I am required to notify the program director if I have concerns about violations of academic integrity by any student in my course. Written assignments may be submitted to Turnitin to check for plagiarism.

Examples of violations of academic integrity include

- Plagiarism
- Copying or sharing exam or homework answers
- Altering or misrepresenting data

If you have any doubt at all as to what constitutes plagiarism review the Hirsh Health Sciences library guide on [Plagiarism](#) or contact Amy Lapidow, the PHPD research librarian, at [amy.lapidow@tufts.edu](mailto:amy.lapidow@tufts.edu). The library also has [workshops and one-on-one consultations](#) for students.

Good time management, careful notetaking, and use of [citation management tools](#) are critical in avoiding plagiarism. Review this Hirsh Health Sciences library guide on [Citing Information](#) to learn about standard citation formats to help manage your research and citation process.

## Writing Assistance

Free writing assistance is available to all health sciences students through the [Hirsh Health Sciences Library](#). Writing coaches will help you plan, organize, draft, and fine-tune your papers as well as help improve your writing skills in the process. Whether you need to clarify your ideas, interpret the assignment, structure your thoughts, connect your paragraphs, or test your success at communicating complex information, the coaches can help. Make sure to allow enough time to schedule an appointment and incorporate feedback prior to the assignment due date. [See this link for more information and to schedule an appointment.](#)

## Student Accessibility Services and Accommodations

The Tufts Public Health Program values the diversity of our students, staff, and faculty; we recognize the important contribution each student makes to our unique learning community. A student who requires accommodations due to a disability can contact the Associate Director of Student Programs and Affairs, Olivia Zimra-Turley, [Olivia.Zimra\\_Turley@tufts.edu](mailto:Olivia.Zimra_Turley@tufts.edu) to determine if reasonable accommodations may be helpful. For more information, please go to [PHPD Accessibility Services](#).

## Course-at-a-Glance

| Session | Date | Topic   | Assignment Due  |
|---------|------|---|---|
| 1       | 1/24 | Introduction: Microeconomics and Health             |   |
| 2       | 1/31 | Markets and Elasticities                            | Problem Set 1   |
| 3       | 2/7  | Efficiency  | Problem Set 2   |
| 4       | 2/14 | Government Distortions of Markets                   | Problem Set 3   |
| 5       | 2/21 | Market Failures and Traditional Governmental Roles  | Problem Set 4   |
| 6       | 2/28 | Economics in Recent Health Reforms                  | Practice midterm exam. Not graded but we will discuss in class. Bring your questions. |
| 7       | 3/7  | Midterm Exam  |   |
| 8       | 3/14 | Asymmetric Information and Individual Mandate       | Memo 1  |
|         | 3/21 | No Class. Spring Break                              |   |
| 9       | 3/28 | Monopoly I: Concept and Model                       | Problem Set 5   |
| 10      | 4/4  | Monopoly II: The Case of Pharmaceuticals            | Problem Set 6   |
| 11      | 4/1  | Cost and Benefit Evaluation                         | Memo 2  |
| 12      | 4/18 | Behavioral Economics and its Applications on Health | Problem Set 7   |
| 13      | 4/25 | "The Price We Pay"                                  | Practice final exam. Not graded but we will discuss in class. Bring your questions.   |
| 14      | 5/2  | Final Exam  |   |

## Session 1 (1 / 24). Introduction: Microeconomics and Health

### Learning Objectives:

- Describe the US Medical Care system in an overview (Review PH243)
- Explain the importance of system thinking in health (Review PH202 and PH203)
- Explain how economics can be an effective tool to allocate resources
- Define and explain economic theories and models
- Explain why economics theories are analytical tools
- Define and explain the distinction between positive statements and normative statements

### Key Concepts:

System thinking, normative analysis, positive analysis, local knowledge problem, gain from trade

### Required Pre-Work:

1. Oxford College Principles of Microeconomics Course. Planet Money: the Pickle Problem  
<https://www.listenotes.com/podcasts/oxford-college/planet-money-the-pickle-yY91K8OuT4/>  
You may find this episode in any podcast platform.  
Use the version provided by the Oxford College Principles of Microeconomics Course (31 min), not the version directly from Planet Money (17 min). The Oxford version includes how the economists unpack the story.  
Keep a note for the used car example. We will revisit it later in the semester.
2. Gawande, A. (2009, May 25). The cost conundrum. The New Yorker.  
<https://www.newyorker.com/magazine/2009/06/01/the-cost-conundrum>
3. Beggs, J. (2019, January 25). What's the difference between positive and normative analysis? ThoughtCo. Retrieved January 6, 2022, from <https://www.thoughtco.com/positive-versus-normative-analysis-1147005>
4. Mankiw (2012): Ten Principles of Economics  
The ten principles of economics are one of the most classic set of concepts in economics. A description of these ten principles:  
[https://www.cengage.com/resource\\_uploads/downloads/0324224729\\_119077.pdf](https://www.cengage.com/resource_uploads/downloads/0324224729_119077.pdf) OR  
<https://www.youtube.com/watch?v=PXJvyHel1aZk>

## Optional Readings and Resources:

1. Refresh your memory from PH202 and 203: Peters D. H. (2014). The application of systems thinking in health: why use systems thinking?. Health research policy and systems, 12, 51.  
<https://doi.org/10.1186/1478-4505-12-51>
2. Depending on which semester you took the courses, you may have used a different reading for system thinking. Any version of such readings is sufficient.
3. Refresh your memory from PH243: Tunstall, L. (2015, October 22). Backgrounder: Making sense of the U.S. health care system: A Primer. Evidence Network. Retrieved January 6, 2022, from  
<https://evidencenetwork.ca/backgrounder-making-sense-of-the-u-s-health-care-system-a-primer-2/>
4. Santerre, R. E., & Neun, S. P. (2013)., Chapter 1
5. Santerre, R. E., & Neun, S. P. (2013)., Appendix 1. This an alternative version of the Beggs (2019) reading
6. For the sports fans, here is a piece of reading that demonstrates specialization in modern day. Dubner, S. (Host) (2022, February 9) Why Does the Most Monotonous Job in the World Pay \$1 Million? (No. 493) [Audio Podcast episode]. In Freakonomics Radio. Runbud Radio.  
<https://freakonomics.com/podcast/why-does-the-most-monotonous-job-in-the-world-pay-1-million/>

## Assignment: Problem Set 1

## Session 2 (1 / 31). Markets and Elasticities

### Learning Objectives:

- Describe and explain why buyers and sellers participate in markets
- Define and explain the law of demand and shifts in market demand
- Define and explain the law of supply and shifts in market supply
- Explain how the market equilibrium price and quantity are determined
- Define price elasticity of demand and understand how to measure it
- Define price elasticity of supply and understand how to measure it
- Explain the relationship between price, total revenue, and the price elasticity of demand
- Define cross-price elasticity of demand and income elasticity of demand and understand how to measure them

### Key Concepts:

Law of demand, law of supply, equilibrium, opportunity cost, elasticity, price elasticity of demand, income elasticity of demand, cross-price elasticity of

demand, complement, substitute, normal good, inferior good, luxury, necessity, income effect, substitution effect

### Required Pre-Work:

1. Watch videos regarding supply, demand, market equilibrium, and elasticity. See Canvas page for the links and reading guides.
2. Gorenstein, D. (Host) (2021, September 30) How Do We Keep the Nursing Shortage From Getting Worse? (No. 131) [Audio Podcast episode]. In Tradeoffs. Leonard Davis Institute.  
<https://tradeoffs.org/2021/09/30/how-do-we-keep-the-nursing-shortage-from-getting-worse/>

### Optional Readings and Resources:

1. Santerre & Neun, Chapter 5, sections on demand for medical care (pp. 126-131) and elasticity (pp. 139-147)

### Assignment: Problem Set 2

## Session 3 (2 / 7). Efficiency

### Learning Objectives:

- Define and explain consumer surplus, producer surplus, deadweight loss, and market inefficiencies

### Key Concepts:

First Welfare Theorem, invisible hands, Adam Smith, consumer surplus, producer surplus, total surplus

### Required Pre-Work:

1. Watch videos regarding efficiency. See Canvas page for the links and reading guides.

### Assignment: Problem Set 3

## Session 4 (2 / 14). Government Distortions of Markets

### Learning Objectives:

- Describe and explain the welfare effects of taxes, subsidies, and price controls using consumer and producer surplus
- Apply the concept of deadweight loss to articulate arguments against government interventions

### Key Concepts:

Deadweight loss, price ceiling, price floor, excise tax, income tax, economic incidence, statutory incidence

### Required Pre-Work:

1. Watch videos regarding tax and deadweight loss. See Canvas page for the links and reading guides.
2. Dubner, S. (Host) (2021, April 28) The True Story of the Minimum Wage Fight (No. 460) [Audio Podcast episode]. In Freakonomics Radio. Runbud Radio. <https://freakonomics.com/podcast/the-true-story-of-the-minimum-wage-fight-ep-460/>

### Optional Readings and Resources:

1. Santerre & Neun, Chapter 5, sections on health insurance and demand for medical care, and moral hazard (pp. 131-139)
2. Santerre & Neun, Chapter 6. Parts of this chapter are very heavy on the mathematics. Don't let them slow you down. Prioritize on general concepts: conventional model of the demand for health insurance, Nyman's theory (how it differs from the conventional model).

### Assignment: Problem Set 4

## Session 5 (2 / 21). Market Failures and Traditional Governmental Roles

### Learning Objectives:

- Explain government's role in classical economic theories
- Compare and summarize schools of thoughts in economic justice
- Apply economic models to explain corrective feature of government interventions to address externality
- Apply externality to explain the role of vaccination

### Key Concepts:

Market failure, tragedy of the commons, public goods, non-excludable, non-rival, free ride, externality, Rawls, veil of ignorance, Nozick, utilitarian, subsidy, externality, antitrust laws

### Required Pre-Work:

1. Watch videos regarding market failures and traditional governmental roles. See Canvas page for the links and reading guides.
2. Frieden, T. R. (2013). Government's Role in Protecting Health and Safety. *New England Journal of Medicine*, 368(20), 1857–1859. <https://doi.org/10.1056/NEJMp1303819>

## Optional Readings and Resources:

1. Santerre & Neun, Chapter 9

### Assignment:

Practice midterm exam. Not graded but we will discuss in class. Bring your questions.

## Session 6 (2 / 28): Economics in Recent Health Reforms

### Learning Objectives:

- Compare traditional insurance model and Nyman model, and explain their differences
- Apply Nyman model to analyze health equity concerns in health insurance infrastructure
- Describe main interventions in place to reduce medical cost, how they were hypothesized to work according to economic theories, and empirical evidence that support or contradict those theories

### Key Concepts:

Copayment, coinsurance, deduction, effective demand, nominal demand (and how does the curve move), moral hazard, Nyman model, efficient moral hazard, inefficient moral hazard

### Required Pre-Work:

1. Nyman J. A. (2004). Is 'moral hazard' inefficient? The policy implications of a new theory. *Health affairs (Project Hope)*, 23(5), 194–199. <https://doi.org/10.1377/hlthaff.23.5.194>
2. Gladwell, M. (2005, August 22). The moral-hazard myth. *The New Yorker*. Retrieved January 4, 2022, from <https://www.newyorker.com/magazine/2005/08/29/the-moral-hazard-myth>
3. Dubner, S. (Host) (2021, March 31) How to Fix the Hot Mess of U.S. Healthcare (No. 456) [Audio Podcast episode]. In *Freakonomics Radio*. Runbud Radio. <https://freakonomics.com/podcast/how-to-fix-the-hot-mess-of-u-s-healthcare-ep-456/>

## Optional Readings and Resources:

1. Gruber, J. (2006). The Role of Consumer Copayments for Health Care: Lessons from the RAND Health Insurance Experiment and Beyond. <https://www.kff.org/wp-content/uploads/2013/01/7566.pdf>
2. Santerre, R. E., & Neun, S. P. (2013)., Appendix 2.



Assignment: Memo 1

## Session 7 (3 / 7). Midterm Exam

Bring a calculator

## Session 8 (3 / 14). Asymmetric Information and Individual Mandate

Learning Objectives:

- Compute the expected values with uncertain events
- Describe the effects of asymmetric information
- Analyze the strategies various actors may take due to asymmetric information
- Explain the economic reasons of the individual mandate in the Affordable Care Act

Key Concepts:

Asymmetric information, hidden actions, hidden characteristics, George Akerlof, adverse selection, signaling, screening

Required Pre-Work:

1. Watch videos regarding asymmetric information and individual mandate. See Canvas page for the links and reading guides.
2. Chandra, A., Gruber, J., & McKnight, R. (2011). The importance of the individual mandate — evidence from Massachusetts. *New England Journal of Medicine*, 364(4), 293–295.  
<https://doi.org/10.1056/nejmp1013067>
3. Fehr, R., McDermott, D., & Cox, C. (2020). Individual Insurance Market Performance in 2019. Kaiser Family Foundation.  
<https://www.kff.org/private-insurance/issue-brief/individual-insurance-market-performance-in-2019/>

Optional Readings and Resources:

1. Akerlof, G. A. (1970). The market for "Lemons": Quality Uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3), 488. <https://doi.org/10.2307/1879431>

Assignment: Problem Set 5

3 / 21. No Class. Spring Break.

## Session 9 (3 / 28): Monopoly I: Concept and Model

### Learning Objectives:

- Compare types of market structure and summarize their characteristics
- Understand the decision-making process in a monopoly market
- Solve a standard monopoly problem with linear demand curve

### Key Concepts:

Perfect competition, monopolistic competition, oligopoly, monopoly, price taker, marginal revenue, price discrimination, barriers to entry

### Required Pre-Work:

1. Watch the [video regarding monopoly](#), and answer:
  1. When does monopoly occur?
  2. When is it a good thing? When is it a bad thing?
  3. What have the government done to address monopoly?
  4. What's price discrimination?
2. University of Minnesota Libraries Publishing. (2016). 1.5 Monopolistic Competition, Oligopoly, and Monopoly. In Exploring Business. University of Minnesota Libraries Publishing edition, 2016.. <https://open.lib.umn.edu/exploringbusiness/chapter/1-5-monopolistic-competition-oligopoly-and-monopoly-2/>
  1. What are the four market structures?
  2. What are their implications for firms' market power?
3. Kaplan, A., & O'Neill, D. (2020). Hospital Price Discrimination Is Deepening Racial Health Inequity. NEJM Catalyst. <https://doi.org/10.1056/CAT.20.0593>
  1. What is cost shifting?
  2. What are the implications in health?

### Optional Readings and Resources:

1. Santerre, R. E., & Neun, S. P. (2013)., Chapter 8. This chapter of textbook is relatively clear. One key take-away is the comparison of four kinds of market structure. What are the four market structures, what are their implications for firms' market power? Pay special attention to Table 8-1 and relevant texts.

### Assignment: Problem Set 6

## Session 10 (4 / 4): Monopoly II: The Case of Pharmaceuticals

### Learning Objectives:

- Describe the market of pharmaceuticals (name brand and generic)
- Explain why natural monopolies occur in medical field
- Discuss the conditions for market entry in medical care settings

### Required Pre-Work:

1. Kesselheim A, Avorn J, Sarpatwari A. (2016) The High Cost of Prescription Drugs in the United States: Origins and Prospects for Reform. JAMA. 2016;316(8):858–871. [doi:10.1001/jama.2016.11237](https://doi.org/10.1001/jama.2016.11237)
2. DW Documentary. (2021) Big Pharma - How much power do drug companies have? [Video]. YouTube. [https://www.youtube.com/watch?v=-z\\_W3yRA9I8](https://www.youtube.com/watch?v=-z_W3yRA9I8)

### Optional Readings and Resources:

1. Frank, R. G., McGuire, T. G., & Nason, I. (2021). The Evolution of Supply and Demand in Markets for Generic Drugs. The Milbank quarterly, 99(3), 828–852. <https://doi.org/10.1111/1468-0009.12517>
2. Knox R. (2020). Insulin insulated: barriers to competition and affordability in the United States insulin market. Journal of law and the biosciences, 7(1), Isaa061. <https://doi.org/10.1093/jlb/Isaa061>
3. Gottlieb, S. (2021). Getting Drugs to Patients. In Uncontrolled spread: Why covid-19 crushed us and how we can defeat the next pandemic (pp. 303–319). Harper Collins Publishers.
4. Hyman, D. & Silver, C. (2020) Are We “Paying Twice” for Pharmaceuticals? Regulation, Winter 2020-2021, pp. 14-18. <https://www.cato.org/sites/cato.org/files/2020-12/cpr-v43n4-3.pdf>

### Assignment: Memo 2

## Session 11 (4/ 11): Cost and Benefit Evaluation

### Learning Objectives:

- Prioritize policy/program options through economic evaluation
- Explain the pros and cons of cost-utility analysis
- Understand multiple approaches to estimate the value of life, explain the ethical and equity limitations in each approach
- Apply discounting to perform analysis across time

### Key Concepts:

Time value of money, discounting, compound interest, rule of 72, cost-benefit analysis, cost-effectiveness analysis, cost-utility analysis, direct medical costs, direct nonmedical costs, indirect costs, the value of life, typical value used in governmental analyses, pros and cons of the human

capital approach and the willingness to pay approach, ICER, cost-effectiveness plane, QALY, health utility index

### Required Pre-Work:

1. Watch videos regarding asymmetric information and individual mandate. See Canvas page for the links and reading guides.

### Optional Readings and Resources:

1. Santerre, R. E., & Neun, S. P. (2013)., Chapter 3.

### Assignment: Problem Set 7

## Session 12 (4/ 18): Behavioral Economics and its Implications and Health

### Learning Objectives:

- Differentiate system 1 and system 2 thinking
- Explain bounded rationality and possible reasons behind it
- Apply behavioral economics concepts in explain issues in health and health care settings

### Key Concepts:

Richard Thaler, Daniel Kahneman, bounded rationality, system 1 and system 2, human and econ, decision fatigue/choice overload, choice architecture, default choice, status quo bias, framing, time inconsistent preferences

### Required Pre-Work:

1. Matjasko, J. L., Cawley, J. H., Baker-Goering, M. M., & Yokum, D. V. (2016). Applying Behavioral Economics to Public Health Policy: Illustrative Examples and Promising Directions. *American journal of preventive medicine*, 50(5 Suppl 1), S13–S19.  
<https://doi.org/10.1016/j.amepre.2016.02.007>  
[Focus on Table 1, which summarizes the key concepts, and how decision makers can apply those insights to build better health policy approaches.]
2. Thaler, R. (2010) Nudge: improving decisions about wealth, health and happiness [Video]. YouTube.  
[https://www.youtube.com/watch?v=p9lPBqvN\\_u4&t=8s](https://www.youtube.com/watch?v=p9lPBqvN_u4&t=8s)

### Assignment:

Practice final exam. Not graded but we will discuss in class. Bring your questions.

## Session 13 (4/25): “The Price We Pay”

### Learning Objectives:

- Describe cost problems in hospitals
- Apply economic theories to analyze the cost problems in hospitals
- Apply economic theories to analyze feasibility and effectiveness of approaches that aimed to reduce hospital cost

### Required Pre-Work:

1. Makary, M. (2019). *The price we pay: What broke American Health Care--and how to fix it*. Bloomsbury Publishing.  
The whole book is recommended. For our class, Chapters 3, 4, and 10 are required.

## Session 14 (5/2): Final Exam

Bring a calculator