



Introduction to Microeconomics: Applications in Health

**Units: 2
Fall 2019**

PPD 501a

Location: RGL 219 ([Map](#))

Instructors:

Jakub P. Hlávka, PhD
jakub.hlavka@usc.edu

Rosanna Smart, PhD
rsmart@rand.org

Office:

514H/I, USC Schaeffer Center, Verna & Peter
Dauterive Hall (VPD)

Office Hours:

Mondays 4-5pm in RGL 219 (please e-mail
beforehand)

Teaching Assistants:

Juan Castanheira Machado

Monday 12pm class, section 51503

castanhe@usc.edu

Office Hours: Wednesday 11:15am-12:00pm in the
RGL Student Lounge (please try to e-mail Juan
before coming); and Sunday 6-6:45pm via Zoom:
<https://us04web.zoom.us/j/9014271431>

Upamanyu Lahiri

Monday 2pm class, section 51505

ulahiri@usc.edu

Office Hours: Tuesday 2-3:30pm in the RGL Student
Lounge (please try to e-mail Upamanyu before
coming)

You may attend either of the TAs' office hours, no
matter which section you are registered for. For
appointments, however, please work with your
assigned TA.

Course Description

This graduate course presents key microeconomic concepts and economic fundamentals for health policy and management professionals. In addition to covering some of the basic principles of microeconomics theory, we will consider the incentives of major healthcare players in the United States, from drug manufactures to hospitals and patients. The course includes many case studies from the real world and encourages student participation.

Learning Objectives and Outcomes

This course has two key learning objectives:

- Understand the conceptual building blocks of microeconomics with a special focus on health, including the supply and demand for health services, insurance, and market structure.
- Develop an understanding of the relationships between all major stakeholders in the U.S. healthcare system.

Required Textbook and Readings

This course has one required textbook and includes additional required readings each week that are at students' disposal via USC library and [Google Scholar](#).

Guinness L., and Wiseman V. (Eds.), *Introduction to Health Economics*, Open University Press; 2011. ISBN: 978-0335243563.

This book is available in an electronic form via the USC library and a hard copy can be purchased, e.g. [here](#). All required readings are listed below and readings may be added/adjusted by the instructors as the course progresses.

Other Reading Sources

Health economics sometimes requires some knowledge of the details of diseases and their treatments, as well as of the important institutions in healthcare delivery and its regulation. Two good sources include the *Kaiser Family Foundation* ([kff.org](#)) and *Health Affairs*. In addition, many government agencies provide useful material. The *Congressional Budget Office* evaluates select healthcare reform proposals using in-house economic models. The *Government Accountability Office* publishes a large number of reports with detailed background information on Federal policy issues. The *Agency for Healthcare Research and Quality* publishes reports on the studies that they fund, and the *Bureau of Labor Statistics* reports on health insurance and employment (see also the reports published regularly by the *Employee Benefits Research Institute*).

The *Medicare Payment Advisory Commission* summarizes current financing problems and reform options for the Medicare program. All of these reports are available for free, or virtually free, and can provide good introductions to policy issues and proposals to deal with them. The *National Center for Health Statistics* at the CDC publishes reports regularly related to the health, healthcare, health insurance, and health behavior of the U.S. population; one good "snapshot" annual report is "Health United States".

Description and Assessment of Assignments, Grading Breakdown

This course requires student participation and per [USC policy](#) for a 2-unit course, each student is expected to spend **4 hours weekly** on course preparation, including readings and written assignments. Please plan accordingly. Grading is based on the following components:

Assignment	Points	% of grade
Four in-class quizzes	3 x 5	15%
In-class midterm	25	25%
Application memo	20	20%
In-class final	30	30%
Participation	10	10%

Quizzes (15%) – There will be four scheduled quizzes testing key concepts covered in class. The three highest scores will be counted towards the final grade. Quizzes will often be taken in the first 10 minutes of the class and cannot be retaken if missed. Quizzes may include material from readings (including the week of the quiz) and class presentations from prior weeks.

Mid-Term Exam (25%) – There will be an in-class, mid-term exam. It will cover all readings and lectures up to the week of the exam. The midterm exam will consist of multiple-choice questions, short answer questions and short essays. Anything from the readings and lectures will be fair game.

Application Memo (20%) – Students will select a topical issue related to healthcare from the news and apply economic concepts covered in the course to it. Word limit is 1,000 words. See detailed instructions below. Topic should be approved by the instructor in Week 4 at the latest. You can submit your topic and a two-sentence description to the TAs anytime before the 4th week’s class in hard copy. You will be notified if your topic needs adjustment by e-mail. A bullet-point outline and working draft of at least 500 words will be required in weeks 9 and 11, respectively. Final memo is due in week 13. Hard copies of all deliverables must be provided to TAs in class. Late submissions will result in point deductions.

Final Exam (30%) – There will be an in-class final exam. It will cover all course readings and lectures, with a slight emphasis on the second half of the course. If the student missed the mid-term exam (permissible only in exceptional circumstances, see below), the final exam will count for 55% of the course grade and may include additional questions. Missing a final exam due to exceptional circumstances may result in rescheduling or an oral exam supervised by other USC faculty. The final exam will consist of multiple-choice questions, short answer questions and short essays. Anything from the readings and lectures will be fair game.

Participation (10%) – Active participation in the class is critical. Students are expected to have completed all of the required readings prior to class and make a meaningful contribution to the discussion. Notification(s) will be provided to students who are not meaningfully participating by the instructor or teaching assistant. Quality over quantity of participation will be prioritized. Participation will be assessed by both the TA and instructor.

Grading Scale

Course final grades will be determined using the following scale:

A	94-100	C-	60-62 (<u>C- is a failing grade</u>)
A-	88-93	D+	58-59
B+	82-87	D	56-57
B	77-81	D-	55
B-	72-76	F	54 and below
C+	67-71		
C	63-66		

Please note that the grading scale may be adjusted should instructors deem it necessary as the course progresses. Any such change would be communicated to all students prior to the final exam.

Students will typically receive grades within two weeks of submission of work.

Additional Policies

Students are asked to review the following policies to better understand what expectations instructors have of them, and how any issues that may arise will be addressed. The instructors aim to create a welcoming, fair and transparent environment both in and outside of class, and students have an important role to play in achieving that objective as well.

Students are expected to have read all required articles prior to coming to class and to participate fully in class discussion and/or presentations. Students are expected to attend and participate in all lectures and are encouraged to take advantage of office hours. Consultations outside of scheduled office hours are encouraged but require an e-mail appointment.

There will be a midterm examination and a final examination. Both will be in-class and closed-book. Both will be cumulative, in the sense that material from the entire course up to that point may appear. Students will be expected to work individually on their examinations and will be graded accordingly. Should extraordinary circumstances (see below) prevent a student from taking the midterm, the instructors may assign greater weight to the final exam, which may contain additional questions or require an additional oral examination. The instructors will work with students to accommodate exceptional circumstances where possible.

Class begins promptly. If the instructor does not convene class within twenty (20) minutes after the hour, it may be assumed that class is canceled for that day. Should an instructor not be available due to exceptional circumstances, the teaching assistant may be asked to step in. In such cases, deliverables and course requirements are not changed unless explicitly communicated by the TAs or instructors.

Extraordinary exceptions may be made in the case of documented emergencies—e.g., a police report and a letter from a licensed physician provided to the instructor. Make up events may require in-person presentation to a committee of USC faculty rather than in-class. The following are not extraordinary exceptions: transportation problems; absence due to out-of-town travel; other pressing deadlines, etc. If possible, **contact the TA** ahead of time if you expect to miss a class and **the instructor** if you expect to miss a graded assignment. Where feasible, good-faith accommodation may be offered on a case-by-case basis, but is not guaranteed.

If a student has a complaint regarding the grading of any examination, they should submit the complaint in writing along with the examination to one of the instructors. If the student has made marks on the returned exam, the written complaint should note it, so that the instructor will not wonder whether the student has attempted to change the response for a higher grade. The instructors will keep a copy of your exam when it's returned. The student must submit this information within one week following the return of the work in question. If the student does not attend class the day the exam is returned, the student still has only one week to request a regrade. Regrades sometimes result in a lower score. A regrade will be done by the instructor who graded the assignment first, but the second instructor may be invited for consultation when necessary.

Unresolved problems regarding class attendance, grading policies or other issues involving the class should be discussed with the instructors first. If the student is not satisfied with the results of these discussions, they should follow [USC procedures](#) for handling course-related disputes. Instructors will aim to respond to constructive feedback but will not be able to make individual exceptions unless justified by medical or other substantive reasons. Requests for special accommodation should be made as early as possible so as to ensure fairness to all students in the course.

Course Schedule

Please note that required readings may be adapted as the course progresses.

	Topics/Daily Activities	Required Readings	Focus	Graded component
Week 1 Aug 26	Course Introduction	Gregory Mankiw, Why Health Care Policy Is So Hard, <i>The New York Times</i> , July 28, 2017.	<ul style="list-style-type: none"> - Course objectives, readings and deliverables - Stakeholders in healthcare - Key objectives in healthcare - How economics research informs health policy 	
Week 2 Sep 2 <i>Holiday (no lecture)</i>	Micro & Macroeconomics	<i>Introduction to Health Economics</i> Chapters 1-2 <ul style="list-style-type: none"> • Key concepts in health economics • Macroeconomics, globalization and health 	<ul style="list-style-type: none"> - Microeconomics, macroeconomics, health economics - Economy, market, equity - Goods, efficiency, marginal analysis, opportunity cost, utility, social welfare - Inflation, health care spending 	Class is not held this week. Please review the readings, textbook exercises, and slides on Blackboard.
Week 3 Sep 9	Demand Theory	<i>Introduction to Health Economics</i> Chapter 3 <ul style="list-style-type: none"> • A simple model of demand 	<ul style="list-style-type: none"> - Review of Week 2 - Demand (individual and market), demand curve, determinants of demand, law of diminishing marginal utility, consumer surplus - Demand for healthcare 	Quiz 1 (5 points)
Week 4 Sep 16	Measuring Demand	<i>Introduction to Health Economics</i> Chapter 4 <ul style="list-style-type: none"> • Measuring demand 	<ul style="list-style-type: none"> - Indifference curve, budget constraint, optimum consumption, income and substitution effects - Demand/price elasticity 	Topic of memo due to TAs in class (hard copy)
Week 5 Sep 23	Production Theory	<i>Introduction to Health Economics</i> Chapter 5 Supply: production in the long and short run	<ul style="list-style-type: none"> - Production possibilities frontier, short/long term production, inputs and outputs 	Quiz 2 (5 points)
Week 6 Sep 30	Cost Theory	<i>Introduction to Health Economics</i> Chapter 6 <ul style="list-style-type: none"> • Supply: costs, economies of scale and the supply curve 	<ul style="list-style-type: none"> - Fixed and variable cost, marginal cost, average cost - Economies of scale, profit maximization - Supply curve, firm surplus 	
Week 7 Oct 7	Competition and Firm Theory	<i>Introduction to Health Economics</i> Chapter 7 <ul style="list-style-type: none"> • A simple market model 	<ul style="list-style-type: none"> - Market equilibrium, perfect competition, healthcare markets 	
Week 8 Oct 14	Midterm	Review of Chapters 1-7	Concepts covered in first seven weeks	In-class midterm (25 points)
Week 9 Oct 21	Market Failure	<i>Introduction to Health Economics</i> Chapter 8 <ul style="list-style-type: none"> • Health care markets and efficiency 	<ul style="list-style-type: none"> - Market failure, monopoly, externalities, deadweight loss - Insurance, adverse selection, moral hazard 	Bullet point outline of memo due to TAs in class (hard copy)
Week 10 Oct 28	Labor markets	Steven A. Greenlaw and David Shapiro, Principles of Economics, 2E, Demand and Supply at Work in Labor Markets Reading TBC	<ul style="list-style-type: none"> - Labor supply and demand - Tradeoffs between labor supply and leisure - Equilibrium in the labor market 	Quiz 3 (5 points)
Week 11 Nov 4	Health Insurance	<i>Introduction to Health Economics</i> Chapter 11	<ul style="list-style-type: none"> - Uncertainty, risk, adverse selection - Consumption smoothing 	Working draft of application memo due to

		<ul style="list-style-type: none"> Private health insurance 	- Insurance premium, out of pocket payment, deductible	the TA in class (500+ words, hard copy)
Week 12 Nov 11	Efficiency and Government Intervention	Emma Hutchinson, Principles of Microeconomics: 4.7 Taxes and Subsidies Reading TBC	- Equity and efficiency - Market failure, externalities - Taxation, tax incidence	
Week 13 Nov 18	Perspectives on Health Care in the United States Compared to Other Countries	Dana P. Goldman, Samuel Nussbaum, & Mark Linthicum, Rapid Biomedical Innovation Calls for Similar Innovation in Pricing and Value Measurement Nicholas Timmins, How to Think About Health Technology Assessment: A Response to Goldman and Coauthors	- National health expenditures - Health technology assessment -	Hard copy of Application Memo due to Prof Hlávka on November 21 at 5pm PT (20 points)
Week 14 Nov 25	Thanksgiving Week	No class. Office hours on Monday 1-3pm (VPD 514I) – please notify instructor by e-mail if attending		
Week 15 Dec 2	Health Behaviors	John Cawley and Christopher J. Ruhm, The Economics of Risky Health Behaviors , Section 1.1, Section 2.1, 2.2, 2.3, 2.4, and Section 5.1.1 Reading TBC	- Substance use disorder, obesity - Health externalities - Pigovian subsidies and taxes	Quiz 4 (5 points)
Week 16 TBD	Final Exam	All course readings	Material from weeks 1-15	Final Exam (30 points)

Application Memo – Instructions

Students will select a topical question related to healthcare, such as prescription drug pricing, how to prevent nursing shortages, or how to allocate scarce treatments. The topic should be one to which multiple economic concepts covered in this course can be applied. Topic selection can be creative but grounded in reality.

Students are asked to discuss at least 2 relevant economic concepts presented in class (see “Focus” areas in the Course Schedule above), and to describe how those concepts can inform the selected question. Students should cite economic evidence and make sure their work is original (paraphrasing a newspaper article, for example, is insufficient and constitutes plagiarism if not cited appropriately). The purpose is to think critically about how principles of microeconomic theory can be applied to real world situations, as well as to consider areas where standard economic models might need to be expanded to account for the complexities of healthcare markets and health behaviors. The consideration of different perspectives and tradeoffs should be grounded in empirical evidence and peer-reviewed literature.

Each memo should consist of the following sections:

1. Introduction
2. Economic Concepts and Evidence
3. Potential Solutions
4. Conclusion
5. Bibliography

Citations should follow a consistent format (such as APA Style, Chicago Manual of Style, or the MLA format) and are not counted towards the word limit. You may include grey literature but at least 8 citations should originate from peer-reviewed academic journals.

Word limit is 1,000 and any text beyond that limit will not be graded. Remember that quality over quantity counts, and make sure to proof-read your text before submission. Hard copies submitted are considered final and no later edits will be accepted.

Please follow all deadlines outlined in the Course Schedule. Late submissions will result in point deductions (10% per day late).

Statement on Academic Conduct and Support Systems

Support Systems

Our School aims to create a safe and healthy environment for all students and staff. If you believe you are at a health or safety risk, please consider using the services available to you via USC, and when relevant, consult with your instructors and other staff.

Student Health Counseling Services - (213) 740-7711 – 24/7 on call

engemannshc.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call

suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 – 24/7 on call

engemannshc.usc.edu/rsvp

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED) | Title IX - (213) 740-5086

equity.usc.edu, titleix.usc.edu

Information about how to get help or help a survivor of harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following protected characteristics: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations.

Bias Assessment Response and Support - (213) 740-2421

studentaffairs.usc.edu/bias-assessment-response-support

Avenue to report incidents of bias, hate crimes, and microaggressions for appropriate investigation and response.

The Office of Disability Services and Programs - (213) 740-0776

dsp.usc.edu

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Support and Advocacy - (213) 821-4710

studentaffairs.usc.edu/ssa

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101

diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call
dps.usc.edu

Non-emergency assistance or information.

Academic Conduct

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, policy.usc.edu/scientific-misconduct.