

University at Buffalo, The State University of New York

Spring 2023

ECO 211: Introduction to Health Economics

Instructor: Sandipa Bhattacharjee

Class time: MWF 9:00AM – 9:50AM (Jan 30th – May 12th, 2023)

Primary Course Website: <https://ublearns.buffalo.edu/>

Class Meeting: Obrian 104 (In- person)

Office Hours: By appointment. Send me an email to schedule an appointment.

Office Location: (Online) [Zoom Meeting Link](#), Meeting ID: 434 636 9188, Passcode: UB_ECO

Contact Information: sandipab@buffalo.edu

Course Description: This is an introductory course of health economics and United States health care system. The primary goal is to introduce the vastly complicated health care system in the United States, including physicians, hospitals, the health insurance market, managed care and long-term care, government programs related to health services, and the pharmaceutical industry. We will cover these topics from an economic perspective and illustrate how classical economic tools can be applied to seemingly complicated policy issues. Historical trends in health care expenditures, an introduction to cost-benefit and cost-effectiveness analysis, determinants of the demand for medical care, health insurance, and problems in health insurance markets (adverse selection and moral hazard) will be studied. ECO 211 and ECO 411 cannot both be taken for credit.

Student Learning Outcomes: Besides learning the basics of our health delivery and financing systems, students are expected to be able to use economics to analyze basic health policies. Students are also expected to learn what are the biggest challenges faced by our health care system from an economic perspective. In addition, students would learn how basic economic tools can be applied in the real world, using health care as an example.

i. Learning Objectives:

- Understand the features of an economic approach to analyzing social issues in general, and to analyzing health, health care, and health insurance issues in particular
- Know historical trends in health care expenditures and identify underlying forces driving these trends
- Know the factors driving the demand for medical care
- Understand the concept of health insurance and the factors driving demand for health insurance
- Understand two common problems, adverse selection and moral hazard, that can arise in insurance markets

ii. Core Competencies:

- Identify the main components and issues of the organization, financing, and delivery of health services and public health systems in the US
- Discuss the policy process for improving the health status of populations
- Apply "systems thinking" for resolving organizational problems
- Apply evidence-based principles and the scientific knowledge base to critical evaluation and decision-making in public health
- Identify unintended consequences produced by changes made to a public health system
- Analyze the effects of political, social and economic policies on public health systems at the local, state, national and international levels

These learning outcomes will be assessed using homework assignments and exams (midterms and final).

Textbook:

Jay Bhattacharya, Timothy Hyde and Peter Tu: Health Economics, First edition, Palgrave MacMillan, 2014.

Students may purchase a physical copy of the textbook.

For some chapters and additional readings, we will also refer to the following book:

Folland, Goodman and Stano, The Economics of Health and Health Care, 8th edition.

Details to be provided in class. Check UBLearn's course outline for details.

In-class Notes: Lecture notes will be posted on UBLearn's before class. Make sure to take notes during the class in addition to what is already posted. This will help you to prepare well for the tests. It is very important that you try to learn and understand the material when you are writing the notes down. If you try to learn the material while I'm teaching it this will make life much easier! You may want to read the chapter before I cover it to make it easier to comprehend. You can get the notes from the book as well.

Course Requirements: Students are expected to form basic knowledge of the United States health care system and its basic problems. The purpose of this course is to provide students with the tools necessary to begin thinking like economists in assessing various health policies. For many students, these tools will be new, and analyzing policies using these tools will be difficult at first. Students should therefore expect to dedicate time and effort to learn to use these tools. The course is structured such that all students, especially those who take ownership of their learning, are willing to repeatedly try (and sometimes struggle), self-evaluate, and seek help when needed - can be successful.

Pre-requisites: This course has no required prerequisites. Because we will frequently use graphs to illustrate concepts, students should have some facility with basic algebra (e.g., plotting lines on x-y axes and finding the intersection of two lines).

Communication: Students should check UBLearn's regularly. Any information I need to communicate regarding the class or lecture will be posted there. Office hours will be held by appointment. Students should also feel free to ask questions during, or after the lecture. Email correspondence should be reserved for scheduling office hours appointments or handling administrative matters related to the course. I will not answer questions about the course content (e.g., questions about lectures or homework assignments) by email. These questions should be asked in office hours or during lecture.

Lecture & Attendance: Students should try to attend every lecture and actively participate in class discussions. The course is designed to cover a substantial amount of material in a short time. Students should not expect to consistently miss lectures and still be able to keep up with the class only by reviewing the lecture slides posted. It is also recommended that students read the relevant material in the textbook before and after the lectures. Taking notes in the class is highly encouraged. Students are responsible for any missed announcements and assignments. Students who are not willing to regularly attend lectures should drop the class. Class participation will be used to evaluate marginal cases when final grades are computed (e.g. C+/B-).

Review Sessions: I will conduct review sessions before the midterms and the final exam. During these sessions you will have the opportunity to ask questions, clarify your doubts regarding the course materials, assignment questions that you got wrong or didn't follow. We will also solve some practice problems and review the materials to be covered for the exams. All students are expected to revise the chapters in the test syllabus before coming for the review sessions and actively participate in the discussion.

Homework Assignments: There will be several homework assigned and posted on UBLearn's. The answers will be posted on UBLearn's soon after the submission deadlines of homeworks. Late assignments will not be accepted unless a student provides proper documentation of a serious illness or family emergency. They should either be (a) typed or (b) neatly handwritten and then carefully scanned. (High-quality scanning is now possible with mobile phone apps. One good option is Adobe Scan, available for free for iOS and Android.) Please make sure the images are intelligible before you submit them. Assignments should be submitted as a single file (not separate files for each page). Students are encouraged to complete these assignments in small groups (of up to 3 students) and may submit a single copy for all group members (You can decide your own group). **Dates to be announced in class**

Midterms: There will be two midterm exams. These exams will be proctored in class. There will be no make-up exams. Students who fail to take an exam but can provide proper documentation of a serious illness or family emergency will have increased weight placed on the final exam score in the calculation of their course grade. Students must complete these exams individually. **[Dates to be announced in class]**

Final: The final exam will be offered at the time date provided by the registrar **(5/17/2022, Obrian 104, 8:00AM – 11:00AM)**. This exam will be cumulative.

Grading Policy: The following are the weights given to assignments, and exams:

Attendance + Class Participation	10%
Homework Assignments	20%
Midterm 1	20%
Midterm 2	25%
Final	25%

Grading Scale: Final grades will be assigned based on the following scale:

A 93%-100%	C+ 77%-79.9%
A- 90%-92.9%	C 70%-76.9%
B+ 87%-89.9%	D 60%-69.9%
B 83%-86.9%	F< 60%
B- 80%-82.9%	FX Failure for reason of non-attendance

In order to ensure that all students are treated equally, final grades will not be rounded.

Incomplete Grades: Students should be familiar with the incomplete grade policies of the university (<https://catalog.buffalo.edu/policies/explanation.html>)

A grade of incomplete ("I") indicates that additional course work is required to fulfill the requirements of a given course. Students may only be given an "I" grade if they have a passing average in coursework that has been completed and have well-defined parameters to complete the course requirements that could result in a grade better than the default grade. An "I" grade may not be assigned to a student who did not attend the course.

Prior to the end of the semester, students must initiate the request for an "I" grade and receive the instructor's approval. Assignment of an "I" grade is at the discretion of the instructor.

The instructor must specify a default letter grade at the time the "I" grade is submitted. A default grade is the letter grade the student will receive if no additional coursework is completed and/or a grade change form is not filed by the instructor. "I" grades must be completed within 12 months. Individual instructors may set shorter time limits for removing an incomplete than the 12-month time limit. Upon assigning an "I" grade, the instructor shall provide the student specification, in writing or by electronic mail, of the requirements to be fulfilled, and shall file a copy with the appropriate departmental office.

Academic Honesty: Students should be familiar with the academic integrity policy of the university (<https://catalog.buffalo.edu/policies/integrity.html>)

Academic integrity is critical to the learning process. It is your responsibility as a student to complete your work in an honest fashion, upholding the expectations your individual instructors have for you in this regard. The goal is to ensure that you learn the content in your courses in accordance with UB's academic integrity principles, regardless of whether instruction is in-person or remote. Thank you for upholding your own personal integrity and ensuring UB's tradition of academic

excellence.

Extra-Credit: I might give extra-credit opportunities to students based on the progress of the class. I will be providing the details later during the semester. The extra credit assignment will be based on a movie that you can relate to this class.

COVID-19 Protocols:

- Stay tuned for the latest updates and news regarding the [UB Health and Safety Guidelines](#).
- Individuals who are experiencing any COVID-19 related symptoms should not attend in- person lectures.
- In the event a UB student meets the criteria for possible infection/ COVID19 symptoms/ tested positive should inform the instructor immediately via EMAIL and no later than 24 hours after missing class.
- Any student who receives a positive COVID-19 test result should [isolate](#) and report it via [UB's confidential reporting form](#).
- UB Student Health Services will coordinate with the Erie County Department of Health for further guidance and direction. [Student Health Services has plans](#) in place and is prepared to isolate students, monitor their symptoms and coordinate with local and state health authorities to ensure they receive proper care.

Students who are not complying with the public health behavior expectations will be asked to comply. Should the non-compliant behavior continue, course instructors are authorized to ask the student to leave the classroom. Non-compliant students may also be referred to the Office of Health Promotion to participate in an online public health class to better educate them on the importance of these public health directives for the entire community.

Expectations for student behavior:

- Students are expected to be on time for class and not miss the introductory announcements.
- Students should turn off phones or any other mobile device. If required, you can use your laptop to take notes. You should not browse the internet, play games, or engage in other kind of activities during class time. Arriving late for class, chatting during class, ringing of phones, nonacademic use of laptops– are obstruction to the teaching/learning process and will not be tolerated.
- Students are expected to come to class prepared. Do the assignments and go over the materials covered in previous lecture. The course is structured such that each lecture depends heavily on previous lectures. It is therefore advisable to study the contents of the missed lecture as soon as possible by making use of the office hours, classmates, lecture slides.
- Class participation is an important component of learning, and so students are encouraged to ask and answer questions during lecture sessions. It is probable that any concept students do not understand is also difficult for their peers. Students should not hesitate to bring their questions and doubts in class.
- Check UBLearns regularly and your UB-mail. I will post announcements, lecture notes, additional readings, assignments, due dates, etc. throughout the semester. I will assume you are aware of everything I send via email or post on the Blackboard. Students are responsible for any missed announcements and assignments.
- Try not to get behind. It's tempting with the test structure to just forget about what's already been quizzed but the material builds over time.
- Respect the views and learning needs of other students. Refrain from any behaviors that might be disruptive to fellow students.
- Students are expected to behave with respect towards their peers and the instructor.
- Language, terms or words that are disrespectful or offensive to members of the learning community are not acceptable and will not be tolerated in class.
- Do not use any unfair means during exams.

Accessibility Resources: If you require classroom or testing accommodations due to a disability, please contact Accessibility Resources. You can reach AR in person in 60 Capen Hall, by phone at (716) 645-2608, or by email at [stu-](#)

accessibility@buffalo.edu. Please inform me as soon as possible about your needs so that we can coordinate your accommodations. (<https://www.buffalo.edu/studentlife/who-we-are/departments/accessibility.html>)

Critical Campus Resources: As a student, you may experience a range of issues that can cause barriers to learning or reduce your ability to participate in daily activities. These might include strained relationships, anxiety, high levels of stress, alcohol/drug problems, feeling down, health concerns, or unwanted sexual experiences. Counseling, Health Services, and Health Promotion are here to help with these or other issues you may experience. You can learn more about these programs and services by contacting:

Counseling Services: 120 Richmond Quad (North Campus), 716-645-2720 202;

Michael Hall (South Campus), 716-829-5800

Health Services: Michael Hall (South Campus), 716-829-3316

Health Promotion: 114 Student Union (North Campus), 716-645-2837

Title IX Coordinator: 716-645-2266

Crisis Services Campus Advocate: 716-796-4399

UB Campus Police: 716-645-2222

Student Life Emergency Funds: <https://www.buffalo.edu/studentlife/help/emergency/emergency-funds.html>

Tentative Course Outline: *Additional details will be posted on UBLearns.*

Although the intention is to follow this schedule as closely as possible, there will be times when deviation will be necessary. Changes will be announced as early as possible so that students will be able to adjust their schedules accordingly. Due dates and the most accurate schedule of content will be posted to UBLearns.

A. Why Health Economics/ Introduction and Overview of U.S. Health Market

Bhattacharya et al. Ch 1

B. Demand for Health & Health Care

Bhattacharya et al. Chs.2,3,4

C. Suppliers: Physicians and Hospitals

Bhattacharya et al. Chs.5,6

D. Economics of Health Insurance

Bhattacharya et al. Chs.7, 8, 9

***** **Midterm Exam 1** *****

D. Economics of Health Insurance continued/ Information Economics

Bhattacharya et al. Chs.10, 11

E. Economics of Health Innovation

Bhattacharya et al. Ch.12,13,14

***** **Midterm Exam 2** *****

F. Health Policy and Medicare and Medicaid:

Bhattacharya et al. Chs.15,16,17,18

G. Public Health Economics: Externalities and Obesity

Bhattacharya et al. Chs.20,21,22

***** **Final Exam** *****

Other Resources/ Podcasts: There are a lot of good (and some not so good...) podcasts that relate to this class. I do listen to podcasts, and I have sampled the podcasts below and had recommendations from other instructors that I respect. I hope you enjoy them!

- [NPR Planet Money](#) (I do receive this newsletter!)
- [Think Like an Economist](#) (the hosts have also written an excellent intro econ textbook)
- [Econ Talk](#) (conversations for the curious)
- [London School of Economics Health Talks](#) (on current health care issues and policies)

Some of the good sources of news are [The Economist](#), [The Wall Street Journal](#), [the Financial Times](#), or [The New York Times](#) (or a newspaper of similar standing). Reading the news is a great way to know about the current health affairs, health care system and be able to relate the concepts you learn in class to the real world.

Additional Readings (Optional):

Akerlof, George A. 1970. "The Market for 'Lemons' ": Quality Uncertainty and the Market Mechanism." *The Quarterly Journal of Economics* 84 (3):488-500.

Becker, Gary S., Michael Grossman, and Kevin M. Murphy. 1994. "An Empirical Analysis of Cigarette Addiction." *The American Economic Review* 84 (3):396-418.

Becker, Gary S. and Kevin M. Murphy. 1988. "A Theory of Rational Addiction." *The Journal of Political Economy* 96 (4):675-700.

Cutler, David, Allison B. Rosen, and Sandeep Vijan. 2006. "The Value of Medical Spending in the United States, 1960-2000." *The New England Journal of Medicine* 355 (9):920-927.

Finkelstein, Amy, Sarah Taubman, Bill Wright, Mira Bernstein, Jonathan Gruber, Joseph P. Newhouse, Heidi Allen, Katherine Baicker, and Oregon Health Study Group. 2012. "The Oregon Health Insurance Experiment: Evidence from the First Year." *The Quarterly Journal of Economics* 127 (3):1057-1106.

Fuchs, Victor R. 2012. "Major Trends in the U.S. Health Economy since 1950." *The New England Journal of Medicine* 366 (11):973-977.

Garber, Alan, and Jonathan Skinner. 2008. "Is American Health Care Uniquely Inefficient?" *The Journal of Economic Perspectives*, 22(4):27-50.

Gaynor, Martin, Farzad Mostashari, and Paul B. Ginsburg. 2017. "Making Health Care Markets Work: Competition Policy for Health Care." *JAMA* 317 (13):1313-1314.

Gilleskie, Donna B. and Koleman S. Strumpf. 2005. "The Behavioral Dynamics of Youth Smoking." *The Journal of Human Resources* XL (4):822-866.

Grossman, Michael. 1972. "On the Concept of Health Capital and the Demand for Health." *The Journal of Political Economy* 80 (2):223-255.

Hamilton, Barton, Andres Hincapie, Robert Miller, and Nicholas Papageorge. 2017. "Innovation and Diffusion of Medical Treatment." Mimeo.

- Keeler, Emmett B., Joan L. Buchanan, John E. Rolph, Janet M. Hanley, and David M. Reboussin. 1988. *The Demand for Episodes of Medical Treatment in the Health Insurance Experiment*. Santa Monica, CA: RAND Corporation.
- Kim, Beomsoo and Christopher J. Ruhm. 2012. "Inheritances, Health and Death." *Health Economics* 21 (3):127-144.
- Kyle, Margaret, and Heidi L Williams. 2017. "Is American Health Care Uniquely Inefficient? Evidence from Prescription Drugs." Working paper, NBER. 7
- Leibenstein, H. 1950. "Bandwagon, Snob, and Veblen Effects in the Theory of Consumers' Demand." *The Quarterly Journal of Economics* 64 (2):183-207.
- Or, Zeynep, et al. 2010. "Are Health Problems Systemic? Politics of Access and Choice under Beveridge and Bismarck Systems." *Health Economics, Policy and Law*, v. 5, no.3, 269–293.
- Papageorge, Nicholas W. 2016. "Why Medical Innovation is Valuable: Health, Human Capital, and the Labor Market." *Quantitative Economics* 7 (3):671-725.
- Ringard, Ånen. 2011 "Equitable Access to Elective Hospital Services: The Introduction of Patient Choice in a Decentralised Healthcare System." *Scandinavian Journal of Public Health*, v. 40, no. 1, 10–17.
- Roseboom, Tessa J., Jan H.P. van der Meulen, Anita C.J. Ravelli, Clive Osmond, David J.P. Barker, and Otto P. Bleker. 2001. "Effects of Prenatal Exposure to the Dutch Famine on Adult Disease in Later Life: an Overview." *Molecular and Cellular Endocrinology* 185:93-98.
- Sanders, Gillian D., Ahmed M. Bayoumi, Vandana Sundaram, S. Pinar Bilir, Christopher P. Neukermans, Chara E. Rydzak, Lena R. Douglass, Laura C. Lazzeroni, Mark Holodniy, and Douglas K. Owens. 2005. "Cost-Effectiveness of Screening for HIV in the Era of Highly Active Antiretroviral Therapy." *The New England Journal of Medicine* 352 (6):570-585.
- Schulman, Kevin, Jesse Berlin, William Harless, Jon F. Kerner, Shyrl Sistrunk, Bernards J. Gersh, Ross Dube, Christopher K. Taleghani, Jennifer E. Burke, Sankey Williams, John Eisenberg, and Jose J. Escarce. 1999. "The Effect of Race and Sex on Physicians' Recommendations for Cardiac Catheterization." *The New England Journal of Medicine* 340 (8):618-626.
- Spenkuch, Jorg L. 2012. "Moral Hazard and Selection Among the Poor: Evidence from a Randomized Experiment." *Journal of Health Economics* 31:72-85.