

Health Care Markets Spring 2021 Syllabus

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COURSE OVERVIEW

Health care is complicated. The markets that provide it, even more so. To help you make sense of this complexity, Health Care Markets has a triple aim. First, we will cover a series of case studies designed to give you a broad understanding of the global health care system. Second, we will cover the economic models that allow us to explain and predict how these markets work, providing deep insights into the business and policy implications of the issues at hand. Third, we will cover the key statistical methods used to evaluate the effectiveness of health care policies and strategies, focusing primarily on how to use observational data to infer causality — the conclusion that one thing causes another.

ECONOMICS + STATISTICS

This course requires familiarity with microeconomics and statistics at the level of an undergraduate intro course at Duke. You will need to know the basics of elasticity, pricing, and game theory, as well as regressions and probability. I will review some of this material throughout the term for students who lack a sufficient background, but not at a level that will allow you to achieve a full understanding of the concept if you are seeing it for the first time. Fortunately, we have the best TAs at Duke to provide assistance along the way.

WORKLOAD

This is not a TED Talk class. You will not learn anything useful about health care markets if I just give you a handful of light readings followed by a breezy discussion. Given what the world has gone through with Covid-19, we clearly have an acute need for business leaders equipped to solve the most intractable problems in health care. Getting to a point in your career where you can help lead that change will require a lot of hard work. This course will help you get there.

ASSESSMENT

Your final course grade will be based on the following three components:

- I. Class Participation 20%
- II. Online Assignments 40%
- III. Final Exam 40%

Class Participation Effective participation in class discussions requires a thorough familiarity with the readings. Ideally, the following criteria should guide your contributions:

- Relevant are your comments related to the case and comments of others?
- Conceptual are you applying economic and statistical concepts appropriately?
- Original do your comments introduce fresh perspectives into the discussion?
- Substantive have you used specific facts to support your claims?
- Logical is your reasoning consistent and coherent?

Your participation grade for each class will follow a scale from 0 to 5, roughly in line with

- 0 for those who are absent
- 1 for those who attend class but do not participate
- 2-5 for those who participate, depending on the quality of the comments.

Please note that I do not expect every student to participate in every class, and your final score will reflect a weighted average of your best classes. Missing class for interviews, illnesses, or other legitimate conflicts <u>will</u> **not** affect your grade (class recordings will be available on Canvas for those who are absent).

Online Assignments In each class, we will discuss several articles and academic studies related to the day's topic. One of these cases will have an associated online assignment that you will submit on Canvas before class. The written work will total about 2-3 pages of analysis (at most 2-3 paragraphs per question, with some requiring only a sentence or two). Your <u>lowest four</u> scores throughout the term will be dropped automatically, allowing you to skip some assignments in the event that a conflict arises, like recruiting.

Final Exam The final exam will cover all of the course's topics and will require you to evaluate a series of case studies. The style and difficulty will be similar to the online assignments'.

COURSE MATERIALS

All relevant course materials are posted on Canvas. In addition, we will cover the textbook extensively in the class videos and lectures.

Textbook Angrist & Pischke, Mastering 'Metrics: The Path from Cause to Effect

Discussion Questions I will provide a series of preparation questions to guide your reading and facilitate your participation in case discussions.

Readings Links to the articles for each case discussion are posted on Canvas.

Videos Videos explaining the statistical methods used throughout the term are posted on Canvas.

Lecture Summaries I will also post a concise summary of each lecture that emphasizes the key insights from class.

Supplemental Articles I will post articles related to our course topics throughout the term on Twitter @ryanmcdevitt. I do this solely to highlight how our course relates to current issues in the press; you should not consider these articles "required reading."

HONOR CODE

The Fuqua School of Business Honor Code applies to all aspects of this course. The nature of each assignment indicates the type of communication and consultation that is permitted. Work that is described as an individual effort is to be your work alone, without consultation or assistance from any other person. Work that is described as a team effort is to be your team's effort alone, again without consultation or assistance from anyone else. If you are uncertain about the nature of any assignment, please ask me in advance.

COMMUNICATION

You may schedule a meeting with me at any mutually agreed upon time. You may also email me for any reason, at any time (I usually respond quickly). For additional help, you may also contact any of our illustrious academic fellows (their contact information is available on Canvas).

CLASS 1 • FRIDAY, FEBRUARY 12

- Before Submit Online Assignment
- Class Submit Personal Info Forms
 - Review Discussion Questions
 - Read "How Much Alcohol..." NYT article
 - Read "Three or More Eggs..." CNN article
 - Read "The Evidence Supports..." WSJ article
 - Read "Workplace Wellness..." HA article
 - Read "What Coronavirus..." NYT article
 - Read "Mastering Metrics" Chapter 1

During • Course Overview

- Class Are Eggs, Alcohol, & NutraSweet Bad for You? Case Discussion
 - Experimental Design + Causal Inference Lecture
 - Workplace Wellness Programs Case Discussion

- After Review Class Slides
- Class Read Lecture Summary
 - Submit Feedback Survey

CLASS 2 • TUESDAY, FEBRUARY 16

- Before Submit Online Assignment
- Class Review Discussion Questions
 - Read "Nike Says..." NYT article
 - Read "Nike Vaporfly..." NYT article
 - Read "The Best Health Care..." NYT article
 - Read "Americans' Struggles..." LAT article
 - Read "Mastering Metrics" Chapter 2
 - Watch "Health Care Spending" video
 - Watch "Regression + Fixed Effects" videos

- During Nike Vaporfly 4% Case Discussion

 - Class OLS Regression Lecture
 - Fixed Effects Regression Lecture
 - Health Care Systems Around the World Case Discussion

- After Review Class Slides
- Class Read Lecture Summary
 - Submit Feedback Survey

CLASS 3 • FRIDAY, FEBRUARY 19

Before • Submit Online Assignment

Class • Review Discussion Questions

- Read "The Experts Were Wrong..." NYT article
- Read "High Medical Bills..." NYT article
- Read "The Huge Waste..." NYT article
- Read "Medicare Shopping Season..." NYT article
- Read "Where the Frauds..." NYT article
- Read "Value of Care..." NYT article
- Watch "Health Insurance & Insurance Economics" videos
- Watch "Medicare & Medicaid" video

• Why Is US Health Care So Messed Up? Case Discussion

Class • Economics of Insurance Lecture

• Medicare Free-for-All Case Discussion

After • Review Class Slides

Class • Read Lecture Summary

• Submit Feedback Survey

CLASS 4 • TUESDAY, FEBRUARY 23

Before • Submit Online Assignment

Class • Review Discussion Questions

- Read "For Prescription Drug..." WSJ article
- Read "How a Drug Maker Gamed..." NPR post
- Read "The Economics of Indication-Based..." NEJM article
- Read "Payments, Promotion..." HE article

During • Why Are Drug Prices So High? Case Discussion

Class • Economics of Pricing Lecture

• Payments, Promotion, & the Purple Pill Case Discussion

After • Review Class Slides

Class • Read Lecture Summary

CLASS 5 • FRIDAY, FEBRUARY 26

Before • Submit Online Assignment

Class • Review Discussion Questions

- Read "Comparison of Sales..." JAMANO article
- Read "Price Controls..." WSJ article
- Read "Killer Acquisitions..." EG post
- Read "Do Large Pharma..." STAT article
- Read "What You Don't Know..." WSJ article
- Watch "Matching Models" videos

During • Pharma R&D ROI Case Discussion

Class • Matching Models Lecture

- Real Options Lecture
- Killer Acquisitions Case Discussion

After • Review Class Slides

Class • Read Lecture Summary

• Submit Feedback Survey

CLASS 6 • TUESDAY, MARCH 2

Before • Submit Online Assignment

Class • Review Discussion Questions

- Read "Not Even the Mattress..." STAT article
- Read "How Artificial Intelligence..." NEJMC article
- Read "Google AI Beats..." WSJ article
- Read "Procedures Take..." HA article
- Read "Expanding Access..." CF case
- Read "Global Lessons..." CF case

During • Brigham & Women's Case Discussion

Class • Cost Curves + Production Functions Lecture

- Al in Health Care Case Discussion
- Ambulatory Surgery Centers Case Discussion
- Frugal Innovation Case Discussion

After • Review Class Slides

Class • Read Lecture Summary

CLASS 7 • FRIDAY, MARCH 5

Before • Submit Online Assignment

Class • Review Discussion Questions

- Read "Is There a Doctor..." SIEPER post
- Read "Measuring Returns..." JPE article (just intro)
- Read "Can Healthcare IT..." JPE article (just intro)
- Read "Hospital Competition..." MI article
- Read "Mastering Metrics" Chapter 3
- Watch "Instrumental Variables" videos

During • Is There a Doctor in the House? Case Discussion

Class • Instrumental Variables Lecture

- Measuring Returns to Hospital Care Case Discussion
- Can Healthcare IT Save Babies? Case Discussion
- Free to Choose? Case Discussion

After • Review Class Slides

Class • Read Lecture Summary

• Submit Feedback Survey

CLASS 8 • TUESDAY, MARCH 9

Before • Submit Online Assignment

Class • Review Discussion Questions

- Read "Subsidizing Health Insurance..." MI article
- Read "Estimating Marginal Returns..." QJE article (just intro)
- Read "Does Medicare Save Lives?" QJE article (just intro)
- Read "After Midnight..." AEJ article (just intro)
- Read "Mastering Metrics" Chapter 4
- Watch "Regression Discontinuity Design" videos

During • Estimating Marginal Returns to Medical Care Case Discussion

Class • Subsidizing Health Insurance for Low-income Adults Case Discussion

- Regression Discontinuity Design Lecture
- Does Medicare Save Lives? Case Discussion
- After Midnight Case Discussion

After • Review Class Slides

Class • Read Lecture Summary

CLASS 9 • FRIDAY, MARCH 12

Before • Submit Online Assignment

Class • Review Discussion Questions

- Read "Not Everyone Has..." LAT article
- Read "When Fewer..." MI article
- Read "Why It's So Hard..." NYT article
- Read "Why Transparency..." NYT article
- Read "Amazon Launches..." WSJ article
- Watch "How Drug Prices Work" WSJ video
- Watch "High-deductible Health Insurance" video

During • Narrow Networks Case Discussion

Class • Added Value Lecture

- Pharmacy Benefit Managers Case Discussion
- Consumer-Driven Health Care Case Discussion
- Price Transparency in Health Care Case Discussion

After • Read Lecture Summary

Class • Review Class Slides

• Submit Feedback Survey

CLASS 10 • TUESDAY, MARCH 16

Before • Submit Online Assignment

Class • Review Discussion Questions

- Read "Regional Variation..." MI article
- Read "Do Large Health Insurance Subsidies..." MI article
- Read "How Acquisitions Affect..." MI article
- Read "America's Healthcare System..." LAT article
- Read "Mastering Metrics" Chapter 5
- Watch "John Oliver Dialysis" video
- Watch "Differences-in-Differences" videos

During • Regional Variation in Healthcare Use Case Discussion

Class • Health Insurance Subsidies Case Discussion

- Differences-in-Differences Lecture
- Dialysis Mergers Case Discussion

After • Review Class Slides

Class • Read Lecture Summary

CLASS 11 • FRIDAY, MARCH 19

Before • Submit Online Assignment

Class • Review Discussion Questions

- Read "Urology Field Slowly..." NYT article
- Read "When the Surgeon Is a Mom" NYT article
- Read "Did Infamous Tuskegee Study..." NYT article
- Read "The Secret to Keeping..." NYT article
- Read "The Never-Ending Mistreatment..." NYT article
- Read "Researchers Find Racial Bias..." WSJ article
- Read "Covid-19 Has Shone..." Economist article

During • Gender Disparities in Health Care Case Discussion

Class • Horizontal + Vertical Differentiation Lecture

• Racial Disparities in Health Care Case Discussion

After • Review Class Slides

Class • Read Lecture Summary

• Submit Feedback Survey

CLASS 12 • TUESDAY, MARCH 23

Before • Submit Online Assignment

Class • Review Discussion Questions

• Read "Hospital Discharges..." WSJ article

During • Long-term Care Hospitals Case Discussion

Class • Health Care Markets Review + Farewell

After • Review Class Slides

Class • Read Lecture Summary

• Submit Course Evaluation

FINAL EXAM • MARCH 23-March 27

Case • "Strategic Patient Discharge..." AER article

Studies • "The Effect of Bundled Payments..." AER r&r

• "Association of Daily Step Count..." JAMA article