Health Economics, Fall 2021 (Econ 339)

Instructor: Vinish Shrestha

Email: vshrestha@towson.edu

Setting: Synchronous lectures Mondays and Wednesdays (12:30-1:45 pm)

Office Hours: Mondays and Wednesdays (by appointment, held online)

1 Description

With plethora of health reforms implemented around the world in the recent decades, this is an interesting time to study health economics. This course is designed to provide a basic empirical investigation on issues that are at the forefront of current health care situation in America.

Some broad questions of interest are:

- What are some crucial determinants of health care?
- What factors can potentially explain health disparity?
- Did welfare policies such as Medicaid and Medicare help?
- How did the Affordable Care Act affect insurance coverage and health stock in the U.S.? Who benefitted?

Note: The class will be based on my lectures and 8 studies extracted from peer-reviewed journals. The readings are mandatory and a very important aspect of the class. If you fall behind with the assigned readings, it is highly unlikely that you will enjoy the class. Before you commit to the class fully, you should ask yourself whether you are dedicated to read scientific studies. Also, to get exposed to more of a hands-on approach, we will be using R programming to run basic regression specifications throughout the course.

2 Objective

The semester will be divided into three parts.

Part 1. This section will explore the **demand for health care**. First, we will learn some empirical techniques to evaluate whether health care has a downward sloping demand curve. Then we will proceed with two readings that use different empirical techniques to evaluate the efficacy of Medicaid and Medicare policies. These readings shall help derive some insights about the demand for health care.

Empirical techniques: R programming, Regression, Natural Experiments, Regression Discontinuity

Total readings: 2

Part 2. This part will start with the discussion of **health disparity** in the U.S. by relying on more recent studies, which will include one COVID19 study as well. Next, we will evaluate the impacts of Medicaid at its origins. Finally, we will discuss the topic of health disparity by race in America.

Empirical techniques: Natural Experiments, Difference-in-Differences

Total readings: 4

Part 3. This part is dedicated to the Affordable Care Act and understanding its effect on insurance coverage as well as health stock. *Total readings: 2*

Table 1: Grading Criteria

Criteria	Points	% Total Grade
Mid-Exam (March 1)	200	20
Final Exam (May 19)	300	30
Problem Sets	250	25
Presentation	250	25
Total	1000	100

3 Textbook

The class is based entirely on my lectures and assigned readings. We will be using some reading materials from Scott Cunningham's book to get caught up with some empirical techniques along with the lecture slides. The online guide for R programming can be found here.

4 Github

All the course-related materials can be found in github.

5 Statistical Software

We will be using R programming to help us understand basic regression models. Through this, my goal is to empirically demonstrate issues that might be prevalent in empirical analysis as well as discuss some potential measures to get around such issues.

Most preferably, you will need to have R programming downloaded in your local machine. If for some reason this is not feasible, please use the computer labs. Homework assignments will have you use R, so there is no getting around this. The faster you are exposed to it, better it is.

6 Delivery

I will be dispensing (in class) synchronous lecture on Mondays and Wednesdays (12:30 to 1:45 pm), unless the setting changes due to unforeseen circumstances. I will put extra effort to have these lectures recorded and you should be able to access them outside of the class time. However, say, if a certain link does not work, I will not be spending hours digging up the broken link and at this point I will not be responsible.

7 Problem Sets and Exams

The grading criteria is shown in Table 1.

Problem Sets. There will be a total of 5 problem sets, which will comprise 25% of your grade, and you need to solve them in groups. The groups will constructed through the process of random selection and should be announced by the end of the second week (after the add-drop settles down) and you will retain the same group throughout the class. The announcement of groups will be posted on Blackboard.

All problem sets should be submitted online on blackboard in an electronic format. **I will not accept those sent via email.** When you submit a problem set, the following needs to be kept in mind: i) One submission per group (for example, if there is a group of 5, only one problem set solution needs to be turned in), ii) you need to contribute (if you try and free ride your way through, I will give you a zero), iii) all problem sets need to be typed in neatly, and iv) they need to be turned in via blackboard.

In this kind of group work, there will certainly be a tendency to free ride – meaning that you try and avoid working by letting your friend do most of the work. For each person in a group, I will be sending out a

Table 2: Problem set due dates

Problem set #	Due date
1	end of week 3 (Sep 17 11:59 pm)
2	end of week 7 (Oct 15 11:59 pm)
3	end of week 10 (Nov 5 11:59 pm)
4	end of week 12 (Nov 19 11:59 pm)
5	end of week 14 (Dec 10 11:59 pm)

peer evaluation survey, which you need to fill out. For example, say, you and I are in a group; we will each receive a survey using which I evaluate your contribution and you evaluate mine. Now, if a student "X" is consistently getting low evaluations, I will penalize the score of that particular student, and if I have to do this, it will definitely affect your grade.

The other reason why you should not be free riding off of your peer is because the problems in your assignments will be very similar to the problems on your exams. But note that your peers will not be there to help you during your exams. So, I request everyone to learn honestly, this is a great opportunity to learn from your peers; *but you will not be learning at all if you choose a dishonest path.*

The due dates for problem sets are given in Table 2.

Exams. There will be two exams (mid-term and final) on the dates mentioned in Table 1. All of the exams will be held online and you will not be allowed to communicate with one another. The exams will be posted on blackboard on the given dates at 6 am but will disappear by 11:59 pm; you can take the exam anytime in between these hours. But, please make sure that you have enough time to take your exam.

I will make an announcement regarding the exam a week prior to the exam date. I want to make it clear that I will not be reopening the exams if you miss them for no valid reason. The two exams will comprise 500 points out of the total 1000 points.

Presentation. Each group will be allocated a study from the reading list. Group presentation should be made at the end of the semester. The presentation is worth 25% of your grade.

8 Technology

Blackboard. We will be using blackboard to communicate. I will post my lectures, problem sets and all relevant materials of the course on blackboard.

Email. The easiest way to reach me is through email. My email address is mentioned on top part of the syllabus. I will try my best to answer your emails within two-three business days. If you have any questions about the homework, please email me during the week days or setup an appointment for office hours as I will not be answering emails during the weekends.

Office Hours in Blackboard Collaborative. Please email me for the office hours so that we can setup time.

Feedback. I will be conducting several feedback sessions to the entire class in terms of what we have learned, your performance and such. You should be able to keep track of your grade on blackboard. Now, if something (your score) is not recorded, please send me an email. However, blackboard does not accept anything that is past due and I cannot fix this for you.

9 Teaching Evaluations

As per the University's requirement, you are required to complete the teaching evaluation at the end part of the course. I will make an announcement during the class as well, when those are out. Teaching evaluations

Table 3: Grading Scale

Letter Grade	Points Needed
A	930
A-	900
B+	860
B	830
B-	800
C+	760
C	700
D+	660
D	600
F	0

generally are highly selective, which may create a bias in evaluating an instructor. We will need your active participation such that close to accurate judgement is made.

10 Academic Integrity

All students need to work honestly. If I find that you are showing dishonest behavior such as cheating, copying work, or free riding off of your peers' work, I will take harsh actions, which may lead to you failing the course.

11 Disability Support

Any student with accommodation needs based on disability should contact me privately regarding the subject matter. I will require a letter from the Disability Support Services (DSS) approving your accommodation needs. Contact: DDS 7720 York Road, Suite 232, phone 410-704-2638

12 Grading Scale

See Table 3.

13 Course Material

Note that the plan below is subject to change depending on the pace of the class. Each class is different in nature, so if the class requires more discussion time in a particular topic then we will do so. It means that I might have to curtail the reading list.

The course materials will be divided into 3 parts.

13.1 Part 1

Tentative weekly schedule

1. Requisite. Basic Econometrics (week 1- week 3)
   - Lecture notes
   - Regressions, Natural Experiments, Regression Discontinuity
2. Readings (week 4)
   - Experiment setting based on random allocation of treatment
   - Finkelstein et. al 2012
3. Readings (week 5-7)

- Use Regression Discontinuity
- Card et. al 2009

13.2 Part 2

4. Readings (week 8)
   - Shrestha 2020
5. Readings (week 9-10)
   - Difference-in-Differences
   - Goodman-Bacon 2020

Mid-Term Exam

8. Readings (week 11)
   - Jung, Manley and Shrestha 2021
9. Readings (week 12)
   - Alsan and Wanamaker 2021

13.3 Part 3

12. ACA Lecture (week 12)
13. Readings (week 13)
    - Miller et al. 2021
14. Presentations

Final Exam

14 Important Dates

Sept 8: Last day to drop a course with no grade posted to academic record.

Nov 24-28: ThanksGiving Break.