Econ 481-3  
Topics in Econometrics  
Spring 2021

Lecture: TTh 1:30-3:20, in Zoom

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Office Hours: by appointment

Course Description: This course is the third quarter in the graduate econometrics sequence. It is divided in four parts. Part I presents a comprehensive discussion of the most popular instrumental variables approaches currently used in applied work. Part II presents what I consider to be the fundamental notions behind asymptotic approximations. Part III covers the topic of uniformly valid inference, with an emphasis on inference in moment inequality models. Finally, Part IV presents recent methods for inference in the Regression Discontinuity Design.

Grading: Grading will consist on weekly reports (submitted via Canvas), two problem sets due on April 20th and May 11th, and an in-class presentation on one of the topics of Part IV. The problem sets will be available a week and a half before the due date and will consist of theoretical questions and empirical/methodological questions. Weekly reports should avoid displays and formulas and be limited to a maximum of two pages. Finally, for the in-class presentation the students must prepare a slide presentation and write a 6-8 pages long set of lecture notes as described below. The weighting scheme for the final grade will be:

- Weekly Reports: 20%
- Problem sets: 50%
- In-Class presentation: 30%

Lecture Notes: I will provide lecture notes or slides every week with related references you are supposed to read. The readings listed below include most of the articles we will discuss in class.

In-class Presentation: Students should split into 4 groups and choose one of the topics of Part IV by April 27th. The following is expected:
• **Day of presentation**: A slide presentation available to students the morning before class.

• **Day of presentation**: A set of lecture notes that is about 6-8 pages long in a similar format than the one used for the class lecture notes.

• **Grading the day after**: Grading will evaluate the clarity of the slides, the clarity of the lecture note, and the quality of the exposition during the presentation. This part of the course will involve anonymous peer grading, so each student will have to fill out the grading form after each presentation and send it to the instructor.

**AccessibleNU**: Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (847-467-5530) and provide professors with an accommodation notification from AccessibleNU, preferably within the first two weeks of class. All information will remain confidential.

**Zoom**: We will be using Zoom for remote instruction. Each lecture will be recorded and available to watch later on Canvas. If you plan to watch the lecture live, please be aware of the following guidelines:

• The use of video is encouraged. Assuming our connections speeds are fast enough I would prefer if you have your video on during the lecture. If you chose to have your video off and you wish to ask a question, please **turn on your video** when you do so.

• Microphones should be **muted** during lecture. You should of course turn on your microphone when you want to ask a question.

• This is a small class and there are no TAs. This means that I will be not be looking at chat often so I recommend that you DO NOT use chat to try to call my attention or ask a question.

• Note-taking may be challenging in a Zoom lecture. To ease with this, I plan to do the following.
  
  - The slides I use for the lecture will be available for you to download the morning of the lecture day. You should check Canvas before the start of each class.
  
  - During lecture I will make annotations on the slides and you should feel free to do the same.
  
  - After each class I will upload the slides that contain the annotations I made during lectures so if you decided not to take notes while I teach, you will have the completed version of the slides at the end of the lecture.
  
  - If you need to review the material, you will have the recorded lecture available on Canvas.
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Readings


