Econometrics C Econ 120C, Fall 2021

All instruction will be conducted remotely using Zoom and Canvas. Our hope and aim this quarter is to provide as high quality and intellectual experience for students as would have been the case if we were to have been able to meet in person. Of course, there will be some trial and error and we will need to make adjustments along the way.

The information below should be considered extremely tentative, and will likely change depending on our pace and situation through the quarter. I reserve the right to modify this information as needed. Please check the syllabus and Canvas announcements regularly for updates.

Course description: As the last of the econometrics sequence, this course is mainly designed to provide the student with the statistical estimation, and hypothesis testing of the panel data and time series data. We are going to build on the material that you learned in Econ 120A and 120B. You'll learn how to estimate these models on real data sets using Stata, a statistical package that you were introduced to in Econ 120B.

Course web page is available at http://canvas.ucsd.edu/. It will include information relevant to the course, such as syllabus, announcement, homework, and more. You should check this page regularly.

Lectures: Section A: TR 8:00 am – 9:20 am @ https://ucsd.zoom.us/j/98079740037 Section B: TR 9:30 am –10:50 am @ https://ucsd.zoom.us/j/91653007755

Instructor: Dr. Munpyung O

• Office hours: 11:00 am – Noon on Tuesdays and by appointment.

@ https://ucsd.zoom.us/j/6571145643.

• e-mail: m1o@ucsd.edu

Please use your ucsd email and include "Econ 120C-A" or Econ 120C-B in the subject line of your email.

TAs and UIAs

- TA (section A): Lee, youngju, yol006@ucsd.edu
- TA (section B): Han, Mengyan, meh076@ucsd.edu
- UIA (section A): Liu, Xiyue (George), xil006@ucsd.edu
- UIA (section B): Shao, Sara, 11shao@ucsd.edu

TA's discussion sections

- Section A: 5:00 5:50 pm and 6:00 6:50 pm on Mondays
 @ https://ucsd.zoom.us/j/92047641345
- Section B: 6:00 6:50 pm and 7:00 7:50 pm on Wednesdays
 @ https://ucsd.zoom.us/j/97795414241

The first discussion sessions will take place in September 27 for section A and in Sept. 29 for section B.

Office hours:	1) Mondays	7:00 - 8:00 pm	(TA)	@ https://ucsd.zoom.us/j/99123039636
	2) Tuesday	11:00 - noon	(Dr. 0)	@ https://ucsd.zoom.us/j/6571145643
	3) Wednesday	7:00 - 8:00 pm	(UIA)	@ https://ucsd.zoom.us/j/8273309265
	4) Thursday	7:00 - 8:00 pm	(TA)	@ https://ucsd.zoom.us/j/94423730749
	5) Friday	7:00 - 8:00 pm	(UIA)	@ https://ucsd.zoom.us/j/9475432129

Lectures, discussion sections, office hours, and tests will be delivered remotely. Both lectures and TA's discussion sections will be recorded and made available to students asynchronously. You are **strongly** recommended to attend TA discussion sections since the TA will review material covered in class, and also introduce material not covered in class and go over practice problems, the kind of problems you may encounter on exams. You will also be able to ask the TA any question about the material covered in the lectures during the discussion section.

Prerequisites: Econ 120B (Econometrics B) or Math 181B (Intro/Math Statistics II) **Course materials**:

- Required textbook: James H. Stock and Mark W. Watson, *Introduction to Econometrics*, 4th edition, Pearson. You can use other editions of the textbook if you wish, but the problem set will refer to the 4th edition.
 - Your digital course materials are provided by the UC San Diego Bookstore through Canvas and are free for the first two weeks of classes.
 - If, for some reason, you decide you do not want to purchase these materials, you can opt-out of the Inclusive Access program by going to the Redshelf link in your Canvas page and clicking "OPT-OUT". If you opt-out by 10/09/21, your student account will NOT be charged.
- Required Statistical Software: STATA

Our school has a site license for STATA/SE 17. You can download and install Stata in your computer freely. The link for the code, serial number, software file, and Stata installation guide have been posted on Canvas.

• Optional textbook on using STATA: Lawrence Hamilton (2012), *Statistics with STATA (updated for Version 12)*, 8th edition, Cengage Learning.

Problem Sets: I will periodically assign problem sets throughout the course. Even though they will not be collected or graded, it is VERY important to do them. The problem sets are the best way to learn and be prepared for the exams.

Exams: 1. Practice test during week 2.

- 2. Midterm 1: 7:00 8:00 pm on Tuesday, Oct. 19.
- 3. Midterm 2: 7:00 8:00 pm on Tuesday, Nov. 9.
- 4. Final exam: section A (8:00 am class): 8:00 11:00 am on Tuesday, Dec. 7. section B (9:30 am class): 8:00 11:00 am on Thursday, Dec. 9.
- It is the student's responsibility to create a schedule that does not have any conflicts.
- I reserve the right to give an oral test if I feel it is necessary to uphold academic integrity.

Makeup exams: Make-up examinations will be given only under very unusual circumstances and only if the student provides official written notification to the instructor no less than two weeks prior to the missed test. Students who miss a test without a **justifiable** and **verifiable** reason, will most likely fail the course. No exception!

Grades: The overall score will be computed as follows:

- Practice test: 3%
- Midterm 1: 22%
- Midterm 2: 30%
- A comprehensive final: 45%

There is no opportunity in this course to do "extra credit" work. Your grade will be determined solely by the test scores. The overall course grade will be curved. I reserve the right to modify these weights as needed during the quarter.

Technical resources for students:

- Digital Learning: https://keeplearning.ucsd.edu
- Academic Support for Remote Learning: https://commons.ucsd.edu/for-students/index.html
- COVID-19 Information: https://vcsa.ucsd.edu/news/covid-19-info.html

Disability: If you have a documented disability, please bring your documentation to me as soon as possible so that I can make suitable accommodations for you. If you believe that you have a disability and desire accommodation, please register with the Office for Students with Disabilities.

Class conduct: Each student is expected to contribute and help to maintain a positive classroom environment conducive to learning.

Academic Integrity: Any student found responsible for violating UCSD's academic integrity policy will earn a failing grade for the course. In addition, the Council of Deans of Student Affairs will impose a disciplinary penalty. You can find information on the university's policy on academic integrity at this website: http://academicintegrity.ucsd.edu

Course content and schedule (Changes, if any, will be announced in the class.)

The following course schedule should be considered tentative, and will likely change depending on our pace through the quarter. I reserve the right to modify this schedule as needed during the quarter.

- 1. Introduction and a brief review (Chapter 1 8)
- 2. Discrete Choice Model. (Chapter 11)
- 3. Instrumental Variable Regression. (Chapter 12)
- 4. Regression with Panel Data (Chapter 10)
- 5. Experiments and Quasi-Experiments (Chapter 13)
- *6. Time Series Regression (Chapter 15)

I reserve the right to add and/or subtract topics as the course progresses. Not all topics will be covered in the same detail. Time constraints may cause some topics to be omitted.

General comments

- Even if I don't explicitly assign reading from the text, it is a good idea to read the chapter before coming to class in order to have some understanding of the concepts to be presented.
- *This class moves rapidly*. *Cramming* is not an effective way to learn this material. A student who keeps up with the topics as they presented will find the course much more enjoyable and will master the concepts more quickly.
- Attend (Watch) all lectures (videos) on time. You are responsible for any information given during lectures.
- Please do use my office hours or TAs office hours for everything related to the content of the course. If you have doubts about the materials, do not wait until a few hours before the exam.
- Students are encouraged to ask questions in class. You've probably heard this before, but if you have a question, chances are that others in the class have the same question. material. Remember the goal of education is to learn, not to suffer!