# Econometrics C Econ 120C, Fall 2019

**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 120A and 120B.

Course web page: A course web page is available at <a href="http://tritoned.ucsd.edu">http://tritoned.ucsd.edu</a>. It will include information relevant to the course, such as syllabus, problem sets, data sets and more. You should check this page regularly.

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

**Lectures** on Tuesdays and Thursdays

A00: 9:30 am – 10:50 am @ CSB 001
B00: 12:30 pm –1:50 pm @ PETER 104

Instructor: Dr. Munpyung O

• Office: Economics 109

• Office hours: 2:00 pm – 3:00 pm on Tuesdays and Thursdays, and by appointment.

• e-mail: munpyung@ucsd.edu

Please use your **ucsd email** and include "**Econ 120C**" in the subject line of your email. The professor and TA will respond to **thoughtful** emails. We cannot answer all the questions through emails since some econometrics questions are hard to answer through emails.

### Discussion sections:

- Section A01 and A02: 3:00 3:50 pm and 4:00 4:50 pm on Fridays @ CSB 004
- Section B01: 7:00 7:50 pm on Thursday @ PETER 103

## **Teaching Assistants:**

- Nakazawa, Nobuhiko, nnakazaw@ucsd.edu
- Bae, Hannah, hbae@ucsd.edu
- Lee, Youngju, yol006@ucsd.edu
- Lu, Jiajun, jil465@ucsd.edu

**Lectures and Discussion Section**: It is important to come to every lecture. If you should miss a class, it is your responsibility to get the notes and any information provided in class. There is a weekly discussion section for this course. You are **strongly** recommended to attend it 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.

Undergraduate TA (UIA): Tran, Tiffany, tit036@ucsd.edu

**Problem Solving and Economics Tutoring (PSET) Center:** The Economics Department has made a problem solving and tutoring center available to all students in Econometrics (120ABC). PSET is designed to help you learn to tackle problems successfully by having grad and undergrad TAs there to help you think through a problem - right when you get stuck. If you struggle to tackle your homework, we believe that PSET will be an efficient and effective way for you to learn how to think like an economist.

**PSET schedule**: From week 2 to week 10

- Monday Thursday: 5:30pm 8:30pm @ Econ 300
- Sunday: 4:00pm 8:00pm @ Econ 300

Actual hours will be posted here: https://economics.ucsd.edu/undergraduate-program/courses/pset-lab.html

### Course materials:

- Required textbook: James H. Stock and Mark W. Watson, *Introduction to Econometrics*, updated 3rd edition, Pearson. You can use other editions of the textbook if you wish, but the problem set will refer to the updated 3rd edition.
  - The UC San Diego Bookstore provides the digital format of the textbook through TritonEd and is
    free for the two week of classes. After two weeks, your student account will be charged a special
    reduced price unless you opt-out of the content.
  - To opt out click the RedShelf link inside TritonEd and follow the opt out prompt. Click here to view how to access your ebook or opt out.
- Required Statistical Software: Stata
   Our school has a site license for Stata/SE 16. You can download and install Stata in your computer freely.

The code, serial number, software file, and Stata installation guide have been posted on TritonED site of the class.

• 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**: The out-of-class midterm will be given at Center 105 for the section A00 and 216 for the section B00 during 8:00 pm – 9:20 pm on Tuesday, November 5. The final for the section A00 will be given during 8:00 am - 11:00 am on Thursday, December 12 and during 11:30 am - 2:30 pm on Friday, December 13 for the section B00. **You have to take your final exam in the registered section. No exception!** The dates for the exams are not negotiable. If you have a conflict with the scheduled tests, it is your responsibility to drop the course. The final exam will be cumulative but focus more on the material covered after the midterms. All tests are closed book and notes.

**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 a week prior to the missed test. Students who miss a test without a **justifiable** and **verifiable** reason, will most likely fail the course. No exception!

**Quizzes**: We will have several announced and/or unannounced (pop-up) quizzes during lectures. There will be no make-up quizzes.

**Grades**: The overall score will be computed as follows:

• In class quizzes: 10%

• Midterm: 35%

• A comprehensive final: 55%

There is no opportunity in this course to do "extra credit" work. Your grade will be determined solely by the components listed above. The overall course grade, computed using the weights specified above, will be curved. I reserve the right to modify these weights as needed during the quarter.

**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. Do not socialize or read newspapers during class, and be sure your cell phones are turned off. No text messaging is allowed. If you must arrive late or leave early, do so quietly.

**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 7)
- 2. Discrete Choice Model. (Ch 11)
- 3. Instrumental Variable Regression. (Ch 12)
- 4. Regression with Panel Data (Ch 10)
- 5. Experiments and Quasi-Experiments (Ch 13)
- \*6. Time Series Regression (Ch 14, part of Ch 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 summer 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 all lectures. You are responsible for any information given during lectures.
- Please do use my 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.
- Finally, ask questions before, during, or after class or come to my office if you having any trouble with the course material. Remember the goal of education is to learn, not to suffer!