

Econometrics 120C

Team

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1 Organization

Disclaimer I: The information below reflects the official schedule of classes as of July 1, 2020. Please check the schedule for updates.

Disclaimer II: Given the uncertainty due to the pandemic, some of the details on the syllabus may change. Please check Canvas and the syllabus regularly for updates.

1.1 Class

Monday/Wednesday, 8:00am – 10:50am, online via Zoom

1.2 Discussion session

Friday, 9:00am – 10:50am, online via Zoom

In the weekly discussion sessions, the TA will discuss problems sets. The weekly problems sets will be uploaded by Wednesday and discussed in the discussion session on Friday. Note that the weekly problem sets are not graded and you do not have to hand them in.

There will be **no discussion session** in the first week on **July 3, 2020 (Independence Day Holiday)**.

1.3 Asynchronous access

All class sessions and discussion sessions **will be recorded** and made available asynchronously via Canvas.

1.4 Office hours

1.4.1 Kaspar Wuthrich (Instructor)

To accommodate different time zones, Kaspar will offer two office hours:

Monday, 10:50am – 11:50am (after class), online via Zoom

Monday, 5:00pm – 6:00pm, online via Zoom

Additional office hours will be offered before the exams and announced on Canvas.

1.4.2 Nikolay Kudrin (TA)

To accommodate different time zones, Nikolay will offer two office hours:

Wednesday, 1:00pm – 3:00pm, online via Zoom

Wednesday, 6:00pm – 7:00pm, online via Zoom

2 Overview

ECON120C is the third course in the core econometrics sequence. We will study a variety of econometric techniques that are widely applied in business, finance, public policy, and other areas. Throughout, we will focus on both understanding and doing. The understanding will come from lectures, class discussions, and problem solving. The doing will come from statistical software use.

3 Topics

1. Introduction and OLS review
2. OLS asymptotics
3. Threats to the validity of regression analyses
4. Instrumental variables methods
5. Panel data methods
6. Potential outcomes, experiments, and quasi-experiments
7. Binary dependent variable and/or time series analysis (time permitting)

4 Prerequisites

ECON120C is the sequel to ECON120B. You are expected to have a thorough grasp of the material covered in that course; namely, the linear regression model. In addition, you are expected to be familiar with basic statistics and probability, and to have mastered single and multivariable calculus. If you did not learn or do not remember the material covered in the required MATH10 or MATH20 sequence, you will find this course *extremely difficult*.

5 Textbook

The required textbook for this class is *Introduction to Econometrics* (3rd Ed), by James Stock and Mark Watson. The book will be available as an eBook through Canvas. Note that the lectures will also cover additional material not found in the textbook.

Your digital course materials are provided by the UC San Diego Bookstore through Canvas and are free for the first two weeks of classes. After two weeks, your student account will be charged a special reduced price unless you opt-out. If you decide to opt-out you must complete the process by **Tuesday, July 7, 2020** and you will be responsible for sourcing the materials elsewhere.

For any questions about billing please contact textbooks@ucsd.edu.

For any questions about using your eBook please reference [RedShelf Solve](#).

To opt-out:

- Click the RedShelf link in Canvas
- Click View Course Materials
- Scroll down to the gray opt-out button and follow the prompts

You will have until **Tuesday, July 7, 2020** to complete this process and you will be responsible for getting access to the materials elsewhere.

6 Econometrics video handbook (EVH)

You will have access to the Econometrics Video Handbook (EVH) through Canvas. The EVH contains a set of videos on key concepts that we discuss in 120C, and also allows you to review the material discussed in 120A and 120B.

The EVH is an additional and supplemental resource that may be useful to review some of the material we discuss in class. The EVH was designed for a new version of 120C that we will introduce in fall 2020. Therefore, not all videos are directly useful and relevant for our version of 120C, which is not based on the EVH.

7 Software

You will have to use the statistical software package STATA to solve assignments. You can download STATA via Canvas.

Important: The Stata university license will renew at the end of July. Thus, you may have to use a different license towards the end of the course. All relevant information will be posted on Canvas.

8 Webpage

All the material as well as the problem sets will be available on Canvas.

9 Questions

To improve fairness, quality, and efficiency, we will strictly enforce the following policy regarding questions related to the course material:

- We will **not** answer any questions related to the course material via email.
- We are available for questions during and after class, during office hours, and discussion sessions.
- There is an online discussion board on Canvas where you can post all your questions. We will check the discussion board regularly and answer your questions.

10 Assessment

The overall course grade will be based on a weighted average of your grades in the following assessments. There will be no make-up exams. The exception is absence from the final examination for medical reasons, in which case a doctors certificate is required.

If you miss one of the midterms for a verifiable medical/legal/sports reason, I will increase the contribution of the final to 60%. Failure to notify me promptly that you must miss the midterm will result in a zero grade for the midterm. Unexcused absences will also result in a zero.

10.1 Stata assignment (20%)

There will be one graded Stata assignment. The Stata assignments will be lightly graded on three scales: 0%, 50%, and 100%. If your do-file does not run, we will subtract 25%. If you submit your Stata assignment too late, there will be a late submission penalty: we will subtract 25% for every 12hrs that you are submitting too late. There are no regrades for Stata assignments. We encourage group work. However, each student needs to submit their own version of the solution. We will use the Turnitin software to check for plagiarism and compare assignments.

10.2 5 weekly reflection notes (4% each; 20% in total)

There will be a short graded assignment after each week that will be due on **Saturday at 11:59pm**. The assignment is meant to promote better reflection and learning of the materials and you will be expected to submit answers to the three questions below after each week:

1. What were the most important 1-2 new things you learnt from the lecture and/or readings that you did not know before class? Describe one way in which what you learnt connects to either a different subject/topic you are interested in, or a personal experience.
2. What were 1-2 points discussed in lecture/readings that you are still confused/unclear about and would like some further clarification on?
3. What topics/questions would you like to learn more about or discuss more based on content covered in the lecture/readings?

The reflection should be concise and not longer than 1 page (letter format, 12 points, double spacing).

Research on pedagogy shows that such reflection notes are highly effective at promoting learning and helps to make faculty and students accountable for what they have taught/learnt in each lecture. It is also a low-pressure form of assessment. They will be lightly graded as 100% (thoughtful response that engaged with the content of the lecture/readings), 50% (cursory responses that meet a minimum standard) and 0% (did not turn anything in). Each student needs to submit their own reflection. We will use the Turnitin software to check for plagiarism and compare assignments.

11 Midterm (20%):

There will be one midterm, carrying a weight of 20%. More details will be provided on Canvas.

Date and time: Wednesday, July 15, 2020, 8:00am – 9:30am

12 Final (40%)

The cumulative final exam, covering all the material of the course, will have weight of 40%. More details will be provided on Canvas.

Date and time: Saturday, August 1, 2020, 8:00am – 10:59am

13 Other

If you have a documented disability, please email me your documentation 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 ([link](#)).

Students who violate UCSD's academic integrity ([link](#)) policy will earn a failing grade for the course. In addition, the Council of Deans of Student Affairs will impose a disciplinary penalty.