Economics Spring 2018

Econometrics 120C

Team Contact

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1 Organization

Disclaimer: The information below reflects the official schedule of classes as of March 31. Please check the schedule for updates.

1.1 Class

Section A: Monday/Wednesday/Friday, 10:00am – 10:50am in PETER 110 Section B: Monday/Wednesday/Friday, 11:00am – 11:50am in PETER 110

1.2 Discussion sessions

Section A:

- 1. Friday, 3:00pm 3:50pm in SOLIS 104
- 2. Friday, 4:00pm 4:50pm in SOLIS 104

Section B:

- 1. Monday, 3:00pm 3:50pm in SOLIS 104
- 2. Monday, 4:00pm 4:50pm in SOLIS 104

There are no discussion sessions during the first week.

1.3 PSET lab

There will be a Problem Solving and Economics Tutoring (PSET) lab. The TAs will hold their office hours in the PSET lab. More information can be found here:

http://economics.ucsd.edu/undergraduate-program/courses/pset-lab.html

1.4 Office hours

My office hours are on Fridays, 2:30pm – 4:00pm.

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
- 2. OLS Asymptotics
- 3. Correlation and Causality
- 4. Instrumental Variables Methods
- 5. Experiments and Quasi-Experiments
- 6. Panel Data Regressions
- 7. Binary Dependent Variable and/or Time Series Analysis

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. Note that the lectures will also cover additional material not found in the textbook.

The textbook is provided by the UC San Diego Bookstore in a digital format through TritonEd and is 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 of the content. To opt out click the RedShelf link inside TritonEd and follow the opt out prompt, you must opt out by 4/14/18. Click here to view how to access your eBook or opt out.

6 Software

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

7 Webpage

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

8 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 before, during and after class, during office hours, discussion sessions, and in the PSET lab.
- There is an online discussion board on TritonEd where you can post all your questions. We will check the discussion board regularly and answer your questions.

9 Assessment

The assessment has the following components:

- Midterm exam (20%): May 4, 2018 during class (both sections)
- Two STATA assignments (10% each): TBA in class and on TritonEd
- Final exam (60%):

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Section A: June 11, 2018, 08:00am - 11:59pm
Section B: June 15, 2018, 11:30am - 02:29pm
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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. The final exam covers all the material of the course.

If you miss the midterm for a verifiable medical/legal/sports reason, I will increase the contribution of the final to 80%. 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 Examinations

There will be a mid-term exam, carrying a weight of 20%. The cumulative final exam, covering all the material of the course, will have a 60% weight. All exams will be closed book, but you can bring ONE page (one-sided, letter format) of note. It must be handwritten; photo reducing and pasting are not permitted. Bring a calculator (just a simple one will do, no need for scientific or business calculators).

11 Grading policy

All grading problems must be rectified within a week from the time an exam is returned. Re-grading of exams may not be allowed if they were written in pencil. If you write in pencil, however, you can pick up the exam from my office, check the grading immediately, and take care of complaints before leaving the office. Please address all re-grading requests to me. According to a university policy, no re-grading is allowed for final exams.

STATA assignments will be graded on four scales. A score of 0% will be given to homework which is clearly incomplete and has not made a start towards answering some of the questions. A score of 50% will be given to homework which is clearly incomplete, but has made a start towards answering some of the questions. A score of 75% will be given to homework which is largely complete, but does not answer every question in full. A score of 100% will be given to homework which is clearly well-done, and answers all of the assigned problems.

The course grade will be assigned as follows. First, the weighted average of numerical scores will be obtained. Suppose your scores on the STATA assignments are 100 and 75. Your midterm and final exam scores are 80 and 85, respectively. Then the weighted average is:

$$100 \cdot 0.1 + 75 \cdot 0.1 + 80 \cdot 0.2 + 85 \cdot 0.6 = 84.5$$

The weights on the problem sets, midterm and final exam cannot be changed. Second, if the class mean of the weighted average is below 70 points, points will be added to all scores to bring the mean score up to 70 points. Finally, letter grades will be assigned using the following scale:

≥ 95	A+
[90, 95)	A
[85, 90)	A-
[80, 85)	B+
[75, 80)	В
[70, 75)	В-
[65, 70)	C+
[60, 65)	\mathbf{C}
[55, 60)	C-
[50, 55)	D
< 50	F

Note that the scale is exact. So if your score is 84.5, as in the example, you will get a B+. I will not assign letter grades on the midterm. However, you can refer to the above table to see where you stand. The grading policy is a little bit complicated but I think it is very fair.

12 Other

Disabilities will be accommodated. Please refer to OSD policy on what we do to help.