

**Economics 120B
Econometrics B
Class Syllabus**

Instructor:	Patrik Guggenberger (econ120b@gmail.com)
Office:	Department of Economics, Room 315
Office hours:	Tuesday 2:00pm-3:30pm or by appointment
Teaching assistants:	Linchun Chen, lic026@ucsd.edu Jungbin Hwang, j6hwang@ucsd.edu Troy Kravitz, tkravitz@ucsd.edu Xuan Liang, x5liang@ucsd.edu Juwon Seo, jus006@ucsd.edu
TA office hours:	XuanLiang, Monday 1:30pm-3:30pm, Department of Economics 208 Jungbin Hwang, Wednesday 2:00pm-3:30pm, SQ 205
Class time and location:	There are two sections: 1) Tue, Th 5:00-6:20pm Center Hall 216 2) Tue, Th 6:30-7:50pm Center Hall 101
Discussion section:	1) Th 8-8:50 and 9-9:50 pm in Center Hall 113 2) Fr 3:00-3:50 in Center Hall 101 and 4:00-4:50pm in Solis 107

Course description

In this course you will learn to estimate and evaluate statistical models for the analysis of economic data. We will consider the basic linear regression model – which is still the most widely used model in the “real world” – and some of its extensions (as time allows), such as instrumental variable regression. You will learn how to construct the appropriate model depending on the nature of the data and on the relevant question, how to estimate the model and do inference and finally, how to critically interpret the results of the estimation. The focus is primarily on practical applications using actual data; the theory will be introduced only as needed. The first lectures will give a brief review of statistical concepts from Econ120A that are very important for the class. Prerequisite is ECON 120A: Econometrics A or a comparable course.

Textbook

J. Stock and M. Watson, Introduction to Econometrics (second edition), Addison Wesley 2007. (referred to as SW below)

Assignments

There will be 6 problem sets which involve to a great deal empirical exercises.

The software used for the course is STATA. In the second week of class, the basics of STATA will be covered in the discussion sections.

Students have access to STATA in the following computer labs: Econ 100, ERC 117 and CLICS-263/GH263. For lab Info see:

http://acs.ucsd.edu/instructional/labs_servers.php

Individual copies of *Small STATA can be purchased at

<http://www.stata.com/order/schoollist.html> for about \$50.

STATA is essential for the problem sets and exam questions may involve STATA outputs.

The homeworks are graded on a 0,1,2 scale. Problem sets and data will be posted on the course webpage. Solutions will be posted shortly after the class on the day the assignments are due. Assignments handed in after the due date will receive no credit.

Grading

Problem sets: 10%; First Midterm exam 10%; Second Midterm exam 25%; Final exam 55%.

In computing the final grade for the problem sets, the lowest grade of the problem sets will be dropped. We do so to accommodate students who could not hand in a problem set or did not have time to work on a problem set for various reasons (family problems, illness, mix-up about deadline, etc).

In calculating the midterm grades, we value the second midterm 35% and the first midterm 0% of the final class grade, if that improves the student's grade compared to calculating the first and second midterm as 10 and 25%.

The final grade for the course is determined using a curve.

Graded exams and problem sets are returned by the TA during discussion session. The exams cannot be taken home, but can be carefully examined during the discussion session.

Any grade dispute should be put in writing and given to the TA in your session.

The written dispute can only be given to the TA within one week from the time the exam or homework was returned. For grade disputes for an exam, the TA will regrade the entire exam.

Incompletes may be granted for medical reasons ONLY. However, please note that if you show up for the final exam, an incomplete can no longer be granted.

Exams

First Midterm (Review of Econ120A material, hypothesis testing): Thursday, April 12th 2012 in class

Second Midterm: Tuesday, May 8th 2012 in class

Final: 1) A00 June 14th 7:00pm-9:59pm, 2) B00 June 12th 7:00pm-9:59pm

The dates of the exams are fixed. I will not make individual exceptions (for internships, other exams, cultural events...) to these dates, unless there is a certified medical reason. Therefore, make sure now that you don't end up taking three or four exams on one particular day.

No switching to the other section date is permitted for the midterm and final exams because both sections are curved independently and have different exams. On the other hand, you are free to attend whichever classtime you prefer – conditional on space availability.

For both midterms and final exam, a one sided letter size cheat sheet is allowed. You can also bring a simple calculator, but no textbooks, computers, cell phones are allowed. The final exam will be cumulative.

The first midterm and part of the second midterm and final will be multiple choice. To make grading quick and simple, please purchase half-sheet Scantrons (height of a normal sheet of paper but half the width). You can buy them at the bookstore. They cost ~\$.3 and are available e.g. at the register near Perks. They have fifty questions per side. A standard-issue "number 2" pencil is required for filling out the scantrons.

E-mail policy

E-mail messages to the class email account econ120b@gmail.com should be kept to a minimum and should only concern important matters and clarifications that cannot be addressed by attending class and discussion sessions regularly and by checking the syllabus and the class webpage. It is a good idea to contact the TA with questions. You are always welcome and encouraged to come to my office hours for help.

Finally

After the University add deadline, students with extraordinary circumstances or with documentation of a university error may petition the Department of Economics to add courses. Extraordinary circumstances do not include: not being added to the course from the waitlist, forgetting to add a course, etc. Students with an extraordinary circumstance may submit a completed petition, with a written explanation (and documentation, if applicable) to Sequoyah Hall room 245.

If you have a documented disability, please come to talk 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.

Students found guilty of academic dishonesty will earn a failing grade for the course. In addition, the Council of Deans of Student Affairs will impose a disciplinary penalty.

Course outline

This is a rough guideline of the material that we will cover during the quarter. The actual schedule of the course may slightly differ in the end. I will update the schedule as we move on.

Lec Date	Lecture topic	Readings in SW
1 on 4/3	introduction, review statistics	1.1-1.2, 2.1-2.3, 3.1
2 on 4/5	review statistics	2.5-2.6, 3.1-3.2
3 on 4/10	review statistics	3.2-3.3
4 on 4/12	Midterm 1	
5 on 4/17	simple linear regression model	4.1, 4.4
6 on 4/19	simple linear regression model	4.2
7 on 4/24	simple linear regression model	4.5 , 5.1 , 5.4
8 on 4/26	continued/multiple lin reg model	4.3, 5.2, 6.1
9 on 5/1	multiple linear regression	6.2-8, not 6.4
10 on 5/3	OVb, hypothesis tests and CIs	6.1, 7.1-3
11 on 5/8	Midterm 2	
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Homeworks

- 1) Posted Th 4/5 due on Tu 4/10, 8pm, topic: review statistics