ECON120C: Econometrics C. Fall 2011.

Instructor: Brendan K. Beare [bbeare@ucsd.edu]

Teaching Assistants: Group A: Sung Je Byun [s1byun@ucsd.edu]

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Lectures: Group A: Mon-Wed-Fri, 3-3:50pm, Center Hall 119.

Group B: Mon-Wed-Fri, 1-1:50pm, Center Hall 105.

Review Sections: Group A: Friday, 8-8:50am, Center Hall 109.

Friday, 9-9:50am, Center Hall 109.

Group B: Monday, 5-5:50pm, Center Hall 113.

Monday, 6-6:50pm, Center Hall 113.

Review sections will commence in week 2.

Office Hours: Beare: Thursday, 2-4pm, Economics 209.

Byun: Wednesday, 11am-12pm, Economics 116.

Chakravarty: Thursday, 8-9am, Economics 114.
Fang: Thursday, 4-5pm, Sequoyah Hall 234.

Nelson: Monday, 9-10am, Sequoyah Hall 233. Seo: Monday, 4-5pm, Economics 127.

Xu: Tuesday, 10-11am, Sequoyah Hall 225.

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. We will study both the theory of econometrics (using mathematics to understand how and why econometric techniques work) and the application of econometrics (using a computer program to analyze real data).

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**. I have no problem with failing students who have not learned the required mathematical background material. You have been warned.

Textbook:

The required textbook for this class is *Introduction to Econometrics*, 2nd edition, by James Stock and Mark Watson. Lectures will also cover additional material not found in the textbook. Students should attend all lectures or risk missing some important material.

Software:

You will need to use the statistical software package STATA to solve a class assignment. You may access STATA at the computer lab in Econ 100. You may also purchase a student version of STATA at http://www.stata.com/order/schoollist.html for \$48 if you wish.

Website:

Course materials will be uploaded to the course website at ted.ucsd.edu.

Topics:

- **1.** Probability foundations.
- 2. Linear regression.
- 3. Nonlinear regression.
- **4.** Panel regression.
- **5.** Discrete choice.
- 6. Instrumental variables.
- **7.** Time series.

Assessment: STATA assignment: 20%

First midterm exam: 15% Second midterm exam: 15% Final exam: 50%

The examination schedule is as follows:

Group A: First midterm exam: Monday 10/17, 3-3:50pm, Center Hall 119.

Second midterm exam: Monday 11/14, 3-3:50pm, Center Hall 119. Final exam: Friday 12/9, 3pm-6pm, Location TBA.

Group B: First midterm exam: Monday 10/17, 1-1:50pm, Center Hall 105...

Second midterm exam: Monday 11/14, 1-1:50pm, Center Hall 105. Final exam: Monday 12/5, 11:30am-2:30pm, Location TBA.

There will be no make-up exams. The exception is absence from the final examination for medical reasons, in which case a doctor's certificate is required.

The final exam covers all material from the course.

There will be a number of problem sets to complete during the course; roughly one per week. These problem sets will not be collected or graded, aside from the questions involving STATA (see following paragraph). Answers to the problems will be given in the review sections each week. If you do not learn how to solve the problem set questions, you will almost certainly fail the exams.

In some of the later problem sets, you will find questions that require you to use STATA to analyze various data sets. Your answers to these questions must be submitted to me at the end of the term. The final date to submit the STATA assignment is Thursday 12/8, no later than 4pm. Note that I will have office hours that day from 2-4pm, so this may be a good time to submit your assignment if an earlier opportunity does not present itself. You should begin work on this assignment well before the end of the course. Further details will be given during the lectures.

Grading:

Your final grade will be determined based on how well you perform on the assessment exercises just described. The numerical cutoffs you need to reach in order to achieve an A, B, C etc. will not be determined until I have all the final exam grades in front of me. I will provide some advice about what kind of grade you can expect following each of the two midterm exams.

Administrative Issues:

- 1. 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.
- 2. 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.
- 3. If you need to miss a midterm for a verifiable medical/legal/sports reason, I will increase the contribution toward your final grade from the other midterm and the final exam by a total of 15 percentage points. Failure to notify me promptly that you must miss a midterm will result in a zero grade for that midterm. Unexcused absences will also result in a zero.
- 4. 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.