Economics 140B
Econometrics

Course Overview and Objectives:
This is the second of a two courses sequence in undergraduate econometrics at UCSB. Students must have taken Economics 140A and to be familiar with its material. This course will extend the models presented in 140A through a variety of cross-sectional and panel data models. In particular, we will study instrumental variables, non-linear models, fixed and random-effect models, and the analysis of experimental and quasi-experimental data. An important emphasis will be given to applied econometric techniques through in-class demonstrations, sections, and student assignments.

In addition, students are expected to become proficient with the econometric software Stata, which is available at selected UCSB computer labs.

Course Time: Monday and Wednesday, 2:00-3:15, ARTS 1349
Course Website: http://www.econ.ucsb.edu/~olivier/econ140b/econ140b.html
Office Hours: Friday 1:30 - 3:00, or by appointment, 2050 North Hall
Teaching Assistant: Sarah Bana (sarah_bana@umail.ucsb.edu)

Office Hours: Tuesday 12:15 – 2:15, North Hall 2018
Sections: Thursdays 8:00 – 8:50 and 9:00 – 9:50, NH 2212 (classroom) or Phelps 1513 (computer lab), 8:00 – 10:00. We will make weekly announcements about the location of the sections


The course grade will be assigned as follows:

Individual Assignments: (3 individual assignments worth 10% each --- will count best 2) 20%  
Paper Replication Exercise: (see below) 30%  
Final Examination: (held during the examination period) 50%
**Individual Assignments:**

The individual assignments are designed to review and expand on the class material. All assignments must be handed-in **TYPED** (students can hand-write math and diagrams) and are due at the beginning of class on the due date. Late assignments will not be graded. No electronic submissions of assignments; they will not be graded. The best 2 out of 3 assignments will be used in the computation of your final grade.

**Replication Exercise:**

Students will work in teams of 2 and will be asked to select a paper from the American Economic Review (AER), or the American Economic Journals (AEJ), some of the leading academic journals in economics. The AER and AEJ websites now hosts most data files and computer programs used to produce the papers it publishes. Your team’s task will be to select a paper from the journal for which the data files are available, download and process the data to replicate the main regressions models and possibly estimate alternative regressions. Documentation of the replication work through “do” and “log” files will be required. Each team will work on a different paper, (first come, first served) and we will reserve the right to disqualify papers that are not sufficiently empirical. The teams will also prepare a 2 page summary on their chosen paper and replication analysis. Further instructions and assistance on how to proceed with this will be available on the class website and from the teaching assistant.

**Final Examination:**

The final exam will be held during the examination period at the scheduled time by the registrar. The questions will vary in degree of difficulty from easy to challenging, and include both analytical and interpretation questions. Some sample questions will be posted prior of the final examinations.

**Academic Dishonesty:**

Following the university’s policy on academic conduct, all academic dishonesty, such as plagiarism, and other forms of cheating will be met with disciplinary actions.
# Tentative Course Outline - subject to change based on the pace of the class
Additional readings may be assigned as the quarter progresses.

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<td>Class Introduction &amp; Review of Linear Regression with One Regressor,</td>
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<td>Multiple Regression, and Hypothesis Testing</td>
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<td>1/24 – 1/29</td>
<td>Regression Specification: Dummy Variables, Interactions, and Nonlinear</td>
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<td>Regression Analysis of Experimental and Quasi-Experimental Data</td>
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<td>Introduction to Time Series Regression and Forecasting</td>
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