

**University of Colorado at Boulder**  
**Department of Economics**

Prof. Brian Cadena  
[brian.cadena@colorado.edu](mailto:brian.cadena@colorado.edu)  
(303) 492-7908  
Website: CULearn  
<https://culearn.colorado.edu>

Economics 4848: Applied Econometrics, Fall 2010  
Syllabus and Schedule  
Office Hours: TTh 12:30-2:00  
Economics 14A  
Other times by appointment

**Course Description:**

This course will teach you to be comfortable with the essential aspects of performing economic analysis on real-world data. In doing so, we will spend a substantial amount of time mastering STATA, a statistical computer software package designed especially for empirical economic analysis. While you will spend some time doing textbook-style examples, you will also learn to create custom datasets from the US Census for original analysis. Students who successfully complete this course will be qualified to do applied data work for the government, in industry, or in other research/advocacy/policy contexts. The course meets in Humanities 1B45, each TTh (8/24-12/9) from 11:00 AM – 12:15 PM, with the exceptions of a week of individual meetings (11/2, 11/4) and Fall Break (11/23, 11/25).

**Prerequisites:**

To enroll in this course, you must have completed Economics 3070 and at least one of Economics 1088, Math 1081 or Math 1300. Economics 3818 or an equivalent course is also required. This course provides practical hands-on training in using statistical software to analyze economic data. To succeed, students will need a basic command of algebra, as well as a

available through a link posted on the CULearn website. I recommend Stata/IC. Prices are \$65 for a six-month license, \$98 for a one-year license, and \$179 for a perpetual license.

Note: SMALL STATA WILL BE INSUFFICIENT FOR THIS COURSE.

You will receive full STATA documentation in pdf format if you choose to purchase the software. If you expect to use STATA beyond this course, you can feel free to purchase a more advanced copy, but the Intercooled version will allow you to complete all the requirements of this course. Otherwise, you may access STATA on computers in this classroom or in the computer lab in the baseme



the same lab computer throughout the semester, so I will ask that you sit at the same computer every meeting. That will allow for quick and efficient attendance taking.

**Late Assignments/ Missed Examinations Policy:**

Problem sets and quizzes will be submitted through the CULearn website. Problem Sets will be due by 11:00 AM on their due dates. Following a 5-minute grace period, I will deduct 1 point from each assignment for each day it is late. Assignments submitted more than 48 hours after the due date will receive no credit. Quizzes must be submitted by the end of the class period (12:20 PM). There will be additional incentives to complete the quizzes on time. NOTE: You attend class on the day of the quiz to receive credit.

If you miss a quiz or the final exam you will receive no credit unless you provide documentation of a medical or family emergency. In the case of a legitimate emergency, the missed quiz or exam will be given no weight in the calculation of the final grade and other assignments will be reweighted accordingly. There will be no make-up quizzes or exams. If you foresee any conflict that will prevent you from taking a quiz or exam, please let me know as soon as possible and at least two weeks beforehand.

### Covered Topics and Tentative Schedule

Topic	Tentative Dates
Introduction and Research Design	8/24, 8/26(Read Mortgage Paper)
STATA Tutorial	8/31, 9/2, 9/7
Summarizing Continuous Data	9/9, 9/14 (Quiz 1)
Dealing with Categorical Data	9/16
Review of Hypothesis Testing	9/21
Bivariate Regression	9/23, 9/28, 9/30, 10/5 (Quiz 2)
Multiple Regression Basics	10/7
Omitted Variable Bias	10/12, 10/14
Categorical Variables in Regression	10/19, 10/21
IPUMS Tutorial	10/26 (Quiz 3), 10/28
NO CLASS	11/2, 11/4
Individual Project Meetings	11/1-11/3
Interaction Models	11/9, 11/11
Advanced Data Management	11/16, 11/18 (Quiz 4)
Binary Dependent Variables	11/30 (Paper Draft Due 11/30, 5 PM)
Class Presentations	12/2, 12/7, 12/9 (Draft Slides Due 12/

### **Other University Policies:**

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class,