Economics 4848- Applied Econometrics
Fall 2019, MWF 11:00-11:50, Humanities 1B45

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Econ 115
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Course Materials
On Canvas

Office Hours
W 1:30-3 F 9:15-10:45
It is very easy to schedule appointments outside of office hours with me—I am usually in my office during normal business hours. The best way to set up an appointment is by email.

Course Prerequisite
This class requires previous completion of Economics 3818, Intro to Statistics, or the equivalent.

Course Description
The goal of this course is to teach you how to analyze data in order to obtain meaningful inferences, in other words, to use data to say something informative about interesting questions. Because these are skills that are best learned by doing, this requires that students develop facility with a statistical software package. In this course, we will use STATA, a package particularly well suited for empirical economics analysis. While students will exert a fair amount of energy mastering STATA in order to follow the lectures and complete the assignments in this course, it is important to remember that learning STATA commands is only a means to an end, and that the key focus of this course is develop skills in econometric analysis and interpretation.

Course Materials

Textbook:
A course pack developed by Prof. Brian Cadena serves as an informal textbook. It is available in electronic form on the course website.

Software:
Students are not required to purchase their own copies of STATA, as it is available in the computer lab in the basement of the economics building. Note that the economics building is closed on weekends, but remains open until 10pm on weekdays.
You can find a list of other campus labs with STATA at:
http://webdata.colorado.edu/labs/softwaresearch/
(Simply enter STATA as both the software developer and name in the search fields).

Purchasing your own copy of STATA will provide the convenience of working on class material outside of university computer labs. If you chose to purchase your own copy of STATA, you qualify for a substantial discount through the University's GradPlan. Information is available at: http://www.stata.com/order/new/edu/gradplans/student-pricing/
Stata/IC is sufficient for this course. Current price for Stata/IC license for 6 months is $48.

Hardware:

Letter grade standards: I evaluate work in this course from the perspective of an employer. An A on an exam or on the final project means that an employer would consider the student a desirable hire. Standards for other letter grades are based on degree of departure from this standard.

Course Specific Policies

Material from a Missed Class: If you miss class, you are responsible for obtaining the material you missed. You should arrange to obtain log file and notes from a classmate and work through these on your own to review the missed material. Ungraded in-class exercises are posted on the course website for students who miss class to complete on their own. You are always welcome to ask questions in office hours once you have reviewed the notes and completed any missed in-class exercises on your own.

Missed Exams: Make-up exams for the midterms will not be given. Midterm exam absences will only be excused for compelling circumstances (generally family emergencies or documented illness), in which case the other course material will be re-weighted. Students anticipating conflict with an exam date due to religious observance or over-scheduling (3 or more exams on the same day) should bring these to my attention within the first 3 weeks of class.

Class Disruptions: Computers should not be used for non-class activities during class time and cell phones should be stored away during class time.

How Can I Do Better?

I often have students show up in office hours

Course Schedule

Week 1 (Aug 26, 38, 30): Introduction and Getting Started in STATA

Week 2 (Sept 4, 6): Summarizing Continuous Data

Week 3 (Sept 9, 11, 13): Categorical Data

Week 4 (Sept 16, 18, 20): Hypothesis Testing

Mon, Sept 23: Midterm 1

Week 5 (Sept 25, 27): Simple Regression

Week 6: (Sept 30, Oct 2, 4): Non-linear Models

Week 7 (Oct 7, 9): Categorical Variables

Fri, Oct 11: Midterm 2

Week 8 (Oct 14, 16, 18): Multiple Regression

Week 9 (Oct 21, 23, 25): Interaction Models

Week 10 (Oct 28, 30): Omitted Variable Bias, Standard errors and Multicollinearity

Fri, Nov 1: Midterm 3

Week 11 (Nov 4, 6, 8): How to do the Project/IPUMS Tutorial

Week 12 (Nov 11, 13, 15): Individual meetings during class time to discuss final projects

Week 13 (Nov 18, 20, 22): Advanced topics: Logit Model

Week 14: Thanksgiving Break

Week 15 (Dec 2, 4, 6): Advanced Topics: Fixed-Effects Models

Week 16 (Dec 9, 11): Advanced Topics: Difference-in-Differences Models

Thurs, Dec 12, 5 pm, Final Papers Due
Sun, Dec 15, 1:30-4, Final Exam

University Policies

A*ccommodation for Disabilities* If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the [Disability Services website](). Contact Disability Services at 303-492-8671 or [dsinfo@colorado.edu]() for further assistance. If you have a temporary medical condition or injury, see [Temporary Medical Conditions]() under the Students tab on the Disability Services website.

Classroom Behavior Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on [classroom behavior]() and the [Student Code of Conduct]().

Honor Code All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code ([honor@colorado.edu)](); 303-492-5550). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the [Honor Code Office website]().

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct intimate partner abuse (including dating or domestic violence), stalking, protected-class discrimination or harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, [anonymous reporting](), and the campus resources can be found on the [OIEC website]().

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

Religious Holidays: 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, absences for religious observance fall within the course policy of six allowed absences for the semester. Students with religious observance conflicts with scheduled midterm exams will be excused from the midterm and remaining course assignments will be re-weighted, consistent with the excused midterm exam policy for the course.