Economics 4848 Applied Econometrics
Spring 2017

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O ce: ECON 04A
O ce Hours: W 3-4pm, F 12:30-1:30pm or by appointment/email
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Course Description

Applied Econometrics provides an overview of econometric techniques commonly used in applied research in microeconomics. Methods and topics covered in this course will help students develop a deeper understanding of econometrics as well as learn to use STATA, a statistical software package commonly used in economics. Learning to use STATA will take a signi cant amount of time and e ort but will be extremely valuable as it is much more powerful than what you can do in Excel, EViews, etc. Students will apply the econometric models using data from the US Census Bureau and the Bureau of Labor Statistics. In addition, students will be able to apply these skills to a research topic of their choosing.

Typically each week we will discuss the theory for the current topic and then spend some time

If you choose to purchase your own copy of STATA, it will allow you to work on assignments and your research project outside the computer labs. Students can receive a discount on the software through the Universitys GradPlan. Information is available at: http://www.stata.com/order/new/edu/gradplans/student-pricing/ Please note that Small Stata (which only allows for 1,200 observations) will not be su cient for this course. I would suggest Stata/IC license which is $75 for 6 months.

Hardware: You will need a USB memory device to store copies of data and log les from our work in class.

Grade Breakdown

Grades for this course will be based on the following criteria:

- Assignments (20% total)
- 2 Midterm Exams (20% each)
- Final Exam (20%)
- Research project and presentation (20%)

Final grades will be determined by your cumulative performance at the end of the semester, and this may or may not correspond to the typical ten-point grading scale (A's are 90-10, B's are 80-89, etc.) If the nal distribution of grades are lower than expected, I reserve the right to change the grading scale at that time.

Assignments (20% total): Students may work alone or with one other student. If you work with a partner please upload one assignment for both of you. Assignments must be uploaded on D2L 30 minutes before class time on the day they are due. No late assignments will be accepted for any reason. Your lowest homework assignment will be dropped from your overall score for the course. While you will be able to work with a classmate on your homework, your exams will be completed individually. Therefore, it is in your best interest to ensure you fully understand the material.

Midterm Exams (20% each): Midterm exams will be held on Feb. 24 and Mar. 24 during the regularly scheduled class time. The exams will be similar to your homework assignments in that you will be given some data to analyze with accompanying questions and a few theory based questions. Given the nature of programming in STATA and this course, all exams should be considered \cumulative" in the sense that you will need to know how to any and all of the tasks we've learned throughout the semester.

Students must take exams at scheduled times so ensure now that you can attend class the dates of the exams. Exams may not be taken early/late and no make ups are given. If you must miss a midterm exam due to an emergency the weight of the midterm will automatically be divided between the other midterm and nal exam making each worth 30% of your grade. Midterm exam scores will not be dropped due to poor performance or lack of preparation. You cannot miss both midterm exams.

Final Exam (20%): The final exam is due Thursday, May 10th at 8:00pm.

Students with documented disabilities who may need academic accommodations should speak with me during first three weeks of the class. Also contact the Disability Services Office, Willard 322 (phone 303-492-8671).

Research Project and Presentation (20%): Students may work alone or with one other student on a research project applying what you've learned in the course. Your written project is due by 8:00pm on Sunday, May 7th. You should start thinking about your research topic as soon as possible at the beginning of the semester. Your project should pose a testable economic question that can be answered using one of the techniques we discuss in applied econometrics. A sample outline of what to include in your project: Introduce your research question and why it is an important topic to study, citing any relevant sources. Describe the data and empirical technique(s) you use. Conduct one or more types of empirical analysis on your data using techniques from the course. Discuss and interpret your empirical findings. (Roughly 8 pages, double-spaced, including figures and tables.) All tables or figures included should be nicely formatted and concise, i.e. not just copy/pasted from the STATA output

signi cant time on non-class activities will also be counted as absent.

Honor Code: All students are responsible for knowing and adhering to the academic integrity policy of the University of Colorado at Boulder (www.colorado.edu/policies/honor.htmlandwww.colorado.edu/academics/honorcode/). All incidents of academic misconduct will be reported to the Honor Code Council and will result in a failing grade for the course. In particular, since students will be completing a research project be careful to avoid plagiarism (portrayal of anothers work or ideas as ones own) and therefore to conscientiously identify and cite all ideas

Tentative Class Schedule

Assignments are due at the beginning of class unless otherwise noted.

Week	Content	Assignments
Week 1	Jan. 18-Jan. 20: Course Information Conducting Economic Research, types of data	
Week 2	Jan. 23-Jan. 27: Introduction to STATA Creating Variables	
Week 3	Jan. 30-Feb. 3: Exploring Continuous Data, Categorical Data Data management, Error checking	Homework 1 Due 1/30
Week 4	Feb. 6-Feb. 10: Bivariate Regression	