Economics 4848 Applied Econometrics
Fall 2017

Professor J. Klein
Office: ECON 04A
Office Hours: T/Th 12:30-1:45pm or by appointment/email
Email:

If you choose to purchase your own copy of STATA, it will allow you to work on assignments and your 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/ I would suggest Stata/IC license which is $45 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%)

Data 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 by 8:00pm 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 October 24 and November 2 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. The theory sections of each exam will be non-cumulative

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 nal exam is due Wednesday, December 20th at 8:00pm.

Data Project and Presentation (20%): Students may work alone or with **one** other student on a data analysis project applying what you've learned in the course. Assignments are due at 8:00pm unless otherwise noted. Your written project is due by **8:00pm on Sunday, December 17th**. You should start thinking about your 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 and using individual level data. 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 ndings. (Roughly 8-10 pages, double-spaced, including gures and tables.) All tables or gures included should be **nicely formatted and concise, i.e. not just copy/pasted from the STATA output**.

Your research question must be something that can be answered using the individual level data that is available in either the US Census Bureau's American Community Survey or the Current Population Survey. We will spend time in class on what is available and how to extract and build your data set from the data repository IPUMS where these surveys are stored. This data source is **required** to be used by all students unless given special permission by the instructor.

As part of your grade for the project, your chosen research question will be due on **Oct. 8th**, a project proposal will be due on **Oct. 20th**, your cleaned data set will be due on **Nov. 5th**, and your preliminary analysis will be due on **Nov. 12th**. Individual meetings will be scheduled the week of November 13-17, in lieu of regular class. In addition, each student/group will give a presentation the week of December 11-15 discussing their research question, data, methods, and results. Both students must present part of their project if working in a group. Due dates for these portions of your project appear in blue in the schedule.

Your overall grade for the nal project will be determined as follows: Research Question (5 points), Project Proposal (20 points), Data set submission (10 points), Initial Data Analysis (20 points), Presentation (15 points), Final Paper (20 points), Corrections to Outline & Proposal (10 points).

Additional Policies

Attendance: *Attendance is an absolute necessity in this course.* It is where I can help guide you in learning STATA and completing a good research project, and you can get feedback on where improvement is needed. Students are expected to be in attendance **on time** for every class, as it may be di cult for you to make up the material and fully understand programming in STATA

otherwise. It is your responsibility to obtain any material/notes from a class you miss from one of your classmates. Attendance will be recorded every class period and any student missing more than 6 class periods will automatically fail the course. These absences up to 6 are intended to cover any manner of reasons why you might need to miss class, valid or otherwise. These penalties are **non-negotiable**. Those arriving late, leaving before class is dismissed, spending signi cant time on non-class activities will also be counted as absent.

Disability Accommodations: 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 and discuss your needs with your professor.

Religious Observances: Campus policy regarding religious observances requires that faculty make every e ort to deal reasonably and fairly with all students who, because of religious obligations, have con icts with scheduled exams, assignments, or required attendance.

Honor Code: All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the academic integrity policy. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, resubmission, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273) and will result in a failing grade for the course. Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code Council as well as academic sanctions from the faculty member. Additional information regarding the academic integrity policy can be found at the Honor Code O ce website. This misconduct includes, but is not limited to: Represent the work of others as their own, Use or obtain unauthorized assistance in any academic assignment, Give unauthorized assistance to other students, Modify, without instructor approval, an examination, paper, record, or report for the purpose of obtaining additional credit, Misrepresent the content of submitted work.

Sexual Misconduct, Discrimination, Harassment, and/or Related Retaliation: he University of Colorado Boulder (CU Boulder) is committed to maintaining a positive learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct, discrimination, harassment or related retaliation against or by any employee or student. CUs Sexual Misconduct Policy prohibits sexual assault, sexual exploitation, sexual harassment, intimate partner abuse (dating or domestic violence), stalking or related retaliation. CU Boulders Discrimination and Harassment Policy prohibits discrimination, harassment or related retaliation based on race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political a liation or political philosophy. Individuals who believe they have been subject to misconduct under either policy should contact the O ce of Institutional Equity and Compliance (OIEC) at 303-492-2127. Information about the OIEC, the above referenced policies, and the campus resources available to assist individuals regarding sexual misconduct, discrimination, harassment or related retaliation

Tentative Class Schedule

Week	Content	Assignments
Week 1	**Aug. 28-Sept. 1** Course Information, types of data Statistics and Sampling, ACS/CPS Introduction	
Week 2	**September 4-8** Introduction to STATA, Creating Variables	
Week 3	**September 11-15** Data management, Error checking Exploring Continuous Data, Categorical Data	Homework 1 Due 9/12
Week 4	**September 18-22** Bivariate Regression, Hypothesis Testing	Homework 2 Due 9/19
Week 5	**September 25-29** Distribution of $^{\wedge}$ Classical Assumptions and Violations	Homework 3 Due 9/26
Week 6	**October 2-6** Simple Multivariate Regression, Example research paper Thurs., October 5: **Midterm Exam 1**	Research Question due 10/8
Week 7	**October 9-13** Non-linear Models Interpreting Coe cients in Non-Linear Models	Homework 4 Due 10/10
Week 8	**October 16-207**	