

## Economics 4848 Applied Econometrics Spring 2019

Professor J. Klein  
Website: Canvas

Email: [jennifer.klein@colorado.edu](mailto:jennifer.klein@colorado.edu)  
Office: Econ 04A  
Office Hours: T/Th 12:45-1:45pm  
Phone: (303) 492-3021  
Website: Canvas

Teaching Assistant: Brian Marein  
Office: Econ 309A  
Office Hours: M/T 3:30-5pm  
Email: [brian.marein@colorado.edu](mailto:brian.marein@colorado.edu)

### 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 significant amount of time and effort 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 working with data to apply the theory in STATA. This data analysis that we do in class will be similar to your assignments, however the theory behind the techniques we use will also be covered on exams.

### Prerequisite

This class requires previous completion of Econ 3070, Intermediate Micro, and Econ 3818, Intro to Statistics, or the equivalent.

### Course Materials

There is no required text but you may find the following resources helpful:

closed on weekends, but remains open until 10pm on weekdays. If you choose not to buy Stata, please plan your work time accordingly. No late assignments will be accepted because you could not access the computer lab on the weekend. Stata is also available in the Benson computer lab.

You can find a list of other campus labs with STATA at: <http://webdata.colorado.edu/labs/softwaresearch/>

If you choose to purchase your own copy of STATA, it will allow you to work on assignments

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 do 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 final exam. Midterm exam scores will not be dropped due to poor performance or lack of preparation. You **cannot** miss both midterm exams.

**Final Exam (25%):** The final exam is Tuesday, May 7th from 1:30-3:30pm. This exam cannot be skipped or taken at another time so plan accordingly.

**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 10:00pm unless otherwise noted. Your written project is due by **10:00pm on Sunday, December 16th**. 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)

## 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 difficult 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 significant time on non-class activities will also be counted as absent.

This course typically has a long waitlist of students trying to enroll in the class. So, in-line with department policy, if a student does not attend class for the first three class periods he/she will be administratively dropped from the course to make room for others on the waitlist.

**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 accommoda-

Sexual Misconduct Policy prohibits sexual assault, sexual exploitation, sexual harassment, inti-

## Tentative Class Schedule

Week	Content	Assignments
Week 1	<b>January 14-18</b> Course Information, types of data Statistics and Sampling, ACS/CPS Introduction	
Week 2	<b>January 22-25</b> Introduction to STATA, Creating Variables	
Week 3	<b>Jan 28-Feb 1</b>	