

## Economics 4848- Applied Econometrics Fall 2023, MWF 12:20-1:10, MEUN E431

Prof. McKinnish

Econ 115

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### Office Hours

T 1:30-3, Wed 1:30-3

Email to set up an appt outside of office hours

### 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. While in the first few weeks, students will spend time learning STATA, this is only a means to an end, and the key focus of this course is developing skills in econometric analysis and interpretation.

*electronic form on Canvas*

*Software:* Students must install STATA on their laptop for this course:  
<http://www.stata.com/order/new/edu/gradplans/student-pricing/>

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Stata/BE is sufficient for this course and the current price for 6 months is \$48.

### Course Requirements

*Attendance:* Attendance is crucial to success in this class because of the highly cumulative nature of the course material. **Attendance will be taken regularly and any student missing more than 20% (3 weeks of class, or 9 class meetings) of the course's scheduled classes will receive a failing grade.** There is no distinction between excused and unexcused absences, with absences for all reasons, including illnesses and emergencies, counting towards this 9 class limit. Students therefore do not need to email me regarding their absences except in the case of very extenuating circumstances that will cause a multiple week absence. I reserve the right to record an absence for students who spend substantial class time on non-class activities.

*In*



## Course Schedule

Week 1: Introduction and Getting Started in STATA

Week 2: Summarizing Continuous Data

Week 3: Categorical Data

Week 4: Hypothesis Testing

**Fri Sept 22: Review PS 1 due**

**Mon Sept 25: Midterm 1**

Week 5: Simple Regression

Week 6: Non-linear Models

Week 7: Categorical Variables

**Fri Oct 13: Review PS 2 due**

**Mon Oct 16: Midterm 2**

Week 8 (Oct 10, 12, 14): Multiple Regression

Week 9 (Oct 17, 19, 21): Interaction Models

Week 10 (Oct 24, 26): Omitted Variable Bias

**Fri Nov 3: Review PS 3 due**

**Mon Nov 6: Midterm 3**

Week 11: How to do the Project/IPUMS Tutorial

Week 12: Topic selection/Data download

**Wed Nov 15: Project description due**

**Fri Nov 17: Data download report due**

Thanksgiving Break

Week 13: Advanced topics: Logit Model

Week 14: Advanced Topics: Fixed-Effects Models

**Mon Dec 4: Variable summary due**

Week 15: Advanced Topics: Difference-in-Differences Models

**Thurs Dec 14: Final Project Due**

**Final Exam data/time posted by CU registrar in October**

## **University Policies**

### **Classroom Behavior**

Students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote, or online. Failure 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.

For more information, see the [classroom behavior policy](#), the [Student Code of Conduct](#), and the

**Preferred Student Names and Pronouns**

policies for attendance set out above in the syllabus. See the [campus policy regarding religious observances](#) for full details.