## **Economics 4818-002: Introduction to Econometrics**

Spring 2021 TTh 2:20 – 3:35pm Remote (Zoom)

Professor: Adam McCloskey

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Office Hours (Zoom): M 9:00 –11:00am, Th 10:30 – 11:30am

### **Course Description**

The goal of this course is to learn the basics of the theory and practice of analyzing relationships in economic (and other) data. This course serves as an introduction to multiple regression techniques with a focus on economic applications. It includes extensions to discrete response and panel data, as well as concepts such as omitted variables, missing data, sample selection and randomized and quasi-experiments. The course also develops the ability to apply econometric and statistical methods using the computer package STATA.

## **Prerequisites**

ECON 3818 – Introduction to Statistics with Computer Applications (or equivalent).

### **Tentative Course Outline**

The course readings (based upon the  $3^{rd}$  edition of SW) and outline are provided below. The material we will cover may be adjusted somewhat towards the end of the semester.

### I. Introduction

Readings: Chapter 1

## II. Review of Probability and Statistics

Readings: Chapters 2 and 3

# III. Linear Regression with One Regressor

Readings: Chapters 4, 5 and 17.1-17.4

## IV. Linear Regression with Multiple Regressors

Readings: Chapters 6, 7 and 18.1-18.5

# V. Nonlinear Regression

Readings: Chapter 8

# VI. Assessing Regression Studies

Readings: Chapter 9

## VII. Panel Data

Readings: Chapter 10

VIII. Binary D

expression, veteran status, political affiliation or political philosophy. For more information, see the policies on <u>classroom behavior</u> and the <u>Student Code of Conduct</u>.

### **Requirements for COVID-19**

As a matter of public health and safety due to the pandemic, all members of the CU Boulder community and all visitors to campus must follow university, department and building requirements, and public health orders in place to reduce the risk of spreading infectious disease. Required safety measures at CU Boulder relevant to the classroom setting include:

- maintain 6-foot distancing when possible,
- wear a face covering in public indoor spaces and outdoors while on campus consistent with state and county health orders,
- clean local work area.
- practice hand hygiene,
- follow public health orders, and
- if sick and you live off campus, do not come onto campus (unless instructed by a CU Healthcare professional), or if you live on-campus, please alert <u>CU Boulder Medical Services</u>.

Students who fail to adhere to these requirements will be asked to leave class, and students who do not leave class when asked or who refuse to comply with these requirements will be referred to <a href="Student Conduct and Conflict Resolution">Student Conduct and Conflict Resolution</a>. For more information, see the policies on <a href="COVID-19 Health and Safety">COVID-19 Health and Safety</a> and <a href="classroom behavior">classroom behavior</a> and the <a href="Student Code of Conduct">Student Code of Conduct</a>. If you require accommodation because a disability prevents you from fulfilling these safety measures, please see the "Accommodation for Disabilities" statement on this syllabus.

All students who are new to campus must complete the <u>COVID-19 Student Health and Expectations Course</u>. Before coming to campus each day, all students are required to complete the <u>Buff Pass</u>.

Students who have tested positive for COVID-19, have symptoms of COVID-19, or have had close contact with someone who has tested positive for or had symptoms of COVID-19 must stay home. In this class, if you are sick or quarantined, please let me know as soon as possible so that we can develop a plan for missed work.

#### **Accommodation 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 <u>Disability Services website</u>. Contact Disability Services at 303-492-8671 or <u>dsinfo@colorado.edu</u> for further assistance. If you have a temporary medical condition, see <u>Temporary Medical Conditions</u> on the Disability Services website. *Please submit your accommodation letter as soon as possible to ensure we have enough time to set up accommodations*.

#### **Preferred Student Names and Pronouns**

CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

#### **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, (ude) 0.**QET Q** 0.24 0 0 0.24 72.2457 446.6343 cm3 0.24 282Itt s

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. Please let me know within the first two weeks of the course