# Syllabus for ECON 4818-001 Introduction to Econometrics

**Instructor:** Kremena Platikanova-Gross, Ph.D.

Class Time: MWF 10:20 AM - 11:10 AM Remote (Zoom) Office Hours: MWF 9:30 AM - 10:10 AM Remote (Zoom)

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## **Course Description:**

This course will introduce you to the theory and applications of econometric analysis.

We will use Excel for data analysis. The course will provide you with the opportunity to improve your competence and acquire new skills in Excel.

This is a rigorous course and my expectations are high. I expect that you will attend Zoom lectures, participate in class discussions, read the relevant textbook chapters, and complete the assigned homework.

Reading the textbook is essential for success in this class. After each class you should review your lecture notes, the slides and read the relevant sections in the textbook. This will prepare you for the next class, so that you can participate in class discussions and follow the presentation of the new material, which builds upon concepts from the previous class.

## **Prerequisites:**

ECON 3070 and ECON 3818 or its equivalent. These prerequisites will be strictly enforced. If you are enrolled in this course without the required prerequisites, you will be administratively dropped, which can occur at any point during the semester.

## Remote (Zoom) lectures

Lectures will be remote. You are expected to attend and have your video on. This will give me a chance to meet you, it will give you a chance to meet others in the class and will create a class community.

#### iClicker Cloud

I will use the iClicker system to take attendance and enhance participation in class discussions. Your answers to the iClicker questions will not be graded. However, responding to all questions is required to receive full credit for attendance and participation that day.

You will need to <u>Create an iClicker Reef account</u> and <u>link your Reef account to Canvas</u>. Then learn how to <u>use your iClicker Reef account to answer polls during class</u>. You can either use the account from a web browser, or install the iClicker Reef app on a cell phone or tablet.

## **Required Text:**

Introductory Econometrics: A Modern Approach, 7th edition, by Jeffrey Wooldridge. You can also use the older edition.

Again, reading the textbook is essential for success in this class.

#### **Excel:**

The data analysis in this class will require the use of Excel. We will also use the DataAnalysis Toolpak in Excel, an Excel Add-in.

<u>Disclaimer for Mac users:</u> The DataAnalysis Toolpak is available for Excel 2016. The DataAnalysis Toolpak does not work with older versions of Excel for Macs. If you have an older version of Excel for Mac, you can purchase MegaStat for Mac. The cost is around \$15. When you purchase the download you may see a message that you have only about 10 days to use the downloaded software but you will actually have it for the life of your computer. You can purchase MegaStat here:

http://highered.mcgraw-hill.com/sites/0077425995/information center view0/

We will periodically have Excel labs during lecture. The first Excel lab will be targeted at improving your general Excel skills. In the later labs you will practice doing statistical analysis in Excel. Your in-class Excel work will not be graded.

In class I will regularly demonstrate regression analyses and statistical tests using Excel. I will post all Excel files that I have used in class on Canvas. You are advised to take notes in class and redo the Excel analyses after class. Don't hesitate to see me in Zoom office hours if you need Excel help.

# **Grading:**

Your grades will be assigned based on the following break down:

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Midterm 1		20%
Midterm 2		20%
Team homework		25%
Attendance and pa	articipation	5%
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These are the <u>only</u> factors that will be used to determine your course grade. There will be no extra credit.

#### **Exams:**

There will be two midterm exams and a <u>cumulative</u> final exam. The exams will cover material from lectures, the textbook, and homework.

Midterm 1: Monday, September 28<sup>th</sup> Midterm 2: Monday, November 2<sup>nd</sup>

Final exam: Wednesday Dec. 9, 1:30 – 4:00 p.m.

## **Team homework assignments:**

I will post homework assignments on Canvas. Your homework assignments will be done in teams of 4 students. You are free to form your own team. Each team will submit one copy of the completed assignments through Canvas.

Every student should do ALL homework problems prior to meeting with their team. At the team meeting, students should compare their work and determine the correct answers to the homework problems. The idea of the teams is to be able to discuss your work with others. Teams should not divide the homework problems among team members. Every student needs to do all of the problems in order to learn the material and benefit from the homework.

Free-riding should not happen. Please contact me ASAP if any issues arise within your team.

At the end of the semester, your contribution to the team work will be subject to confidential peer evaluation. Your homework score will be weighed by your teammates' evaluations.

# **End-of-Chapter Practice Problems:**

I will post answers to the odd-number end-of-chapter problems in the textbook. You are expected to work through these problems to ensure mastery of the material. Try to do the problems without looking at the answers right away. <u>I will not collect</u> your work on these problems. These are good practice problems for the exams so you are advised to work on those problems.

# Attendance and in-class participation:

Your responses to the iClicker questions in lecture, regardless of whether your answer is correct or not, will count towards your attendance and participation score for that day.

You are allowed to miss <u>two classes</u>. Each additional recorded absence will reduce your attendance and participation score. If you miss more than 20% of classes (9 classes) you will receive attendance and participation score of zero for this course. These absences include both valid (sickness, weather, emergencies) and invalid reasons for not being in class.

Your participation in class discussions is essential for enhancing your and your classmates' learning experience in this class. Your participation is a chance for you to think critically, apply learned concepts and use the learned terminology. Making mistakes is part of learning. So, don't be shy, speak out and get more out of this class!

Also, if you have a question during lecture, feel free to unmute yourself and interrupt me. That won't bother me.

# **Preparing for class:**

The material in this class builds upon material from previous lectures. Before you come to class I expect you to review and master the material from the previous class. This includes studying the lecture notes, the textbook and all materials posted on Canvas for that day. This is critical for your ability to engage in class discussions and to understand the new material that is presented in class.

If you struggle with the material or even if you have minor questions about it, see me in Zoom office hours ASAP. Do not wait until the day before an exam!

#### **Communication:**

I am available to answer questions related to the course material and the homework. The best way to contact me is to see me in Zoom office hours. You can also email me with short questions. I will try to respond to your emails promptly during business hours. Please include ECON 4818 in the subject line.

#### **Tentative Course Outline**

- 1. The Simple Regression Model (Chapter 2)
- 2. Multiple Regression Analysis: Estimation (Chapter 3)
- 3. Multiple Regression Analysis: Inference (Chapter 4)
- 4. Multiple Regression Analysis: OLS Asymptotics (Chapter 5)
- 5. Multiple Regression Analysis: Further Issues (Chapter 6)
- 6. Multiple Regression Analysis with Qualitative Information: Binary Variables (Chapter 7)
- 7. Heteroskedasticity (Chapter 8)
- 8. More on Specification and Data Problems (Chapter 9)
- 9. Additional Multiple Regression Analysis Issues.

# **University Policies**

## **Classroom Behavior**

Both students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote or online. Those who fail 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 policies on classroom behavior and the Student Code of Conduct.

## **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 CU Boulder Medical Services.

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.

Before returning to campus, all students must complete the <a href="COVID-19 Student Health and Expectations Course">COVID-19 Student Health and Expectations Course</a>. Before coming on to campus each day, all students are required to complete a Daily Health Form.

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 and complete the <u>Health Questionnaire and Illness Reporting Form</u> remotely.

If a student discloses to me that they have tested positive for COVID-19 or are having symptoms of COVID-19 or have had close contact with someone who has tested positive for COVID-19, I will submit that information to the Medical Services Public Health Office for the purposes of contact tracing (contacttracing@colorado.edu and/or 303-492-2937).

<u>Please notify me ASAP if you are sick and need an accommodation. You do not need to state the nature of your illness.</u>

## **Accommodation for Disabilities**

## 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, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (honor@colorado.edu); 303-492-5550). Students found

responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the <u>Honor Code</u> Office website.

## Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation

The University of Colorado Boulder (CU Boulder) is committed to fostering an inclusive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, or protected-class discrimination or harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or <a href="mailto:cureport@colorado.edu">cureport@colorado.edu</a>. Information about the OIEC, university policies, anonymous reporting, and the campus resources can be found on the <a href="mailto:OIEC website">OIEC website</a>. Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, dating and domestic violence, stalking, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

# **Religious Holidays**

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. See the <u>campus policy regarding religious observances</u> for full details. <u>Please notify me within the first two weeks of classes if you need an accommodation</u>.