Syllabus for ECON 4818-002 Introduction to Econometrics

Instructor: Kremena Platikanova-Gross, Ph.D.

Class Time and Room: T, Th 12:30 PM - 1:45 PM in ECON 119

Zoom Office Hours: T, Th 2:15 PM – 3:15 PM and by appointment

Zoom link and password are posted on Canvas

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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 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.

Required Text:

Introductory Econometrics: A Modern Approach, 7th edition, by Jeffrey Wooldridge. You can also use the older edition. Reading the textbook is essential for success in this class.

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 office hours ASAP. Do not wait until the day before an exam!

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.

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. I recommend you take notes in class and redo the Excel analyses after class. Don't hesitate to see me in office hours if you need Excel help.

iClickers

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

Before class on Thursday, August 29th, you will need to have an iClicker student app account and register your clicker.

Grading:

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

Midterm 1		20%
Midterm 2		20%
Team homework		25%
Attendance and participation		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: Tuesday, October 3rd
Midterm 2: Thursday, November 9th

Final exam: Sunday, December 17th 4:30–7 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 digital copy of the completed assignments through Canvas and one physical printout at the beginning of class when the assignment is due. It is important that you submit your assignment at the beginning of class because I will be discussing the answers in class.

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.

If a student does not contribute to a homework assignment, their name should not appear on the team's submitted work and you should contact me ASAP. Only the names of the contributing teammates should appear on the submission. 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 teamwork 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 2 classes for whatever reasons (excused and unexcused). Each additional absence will reduce your attendance and participation score. If you miss more than 20% of classes (6 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, participate in class discussions and get more out of this class!

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

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 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 <u>classroom behavior</u> policy, the <u>Student Code of Conduct</u>, and the <u>Office of Institutional Equity and Compliance</u>.

Requirements for COVID-19

As a matter of public health and safety, all members of the CU Boulder community and all visitors to campus must follow university, department and building requirements and all public health orders in place to reduce the risk of spreading infectious disease. CU Boulder currently requires COVID-19 vaccination and boosters for all faculty, staff and students. Students, faculty and staff must upload proof of vaccination and boosters or file for an exemption based on medical, ethical or moral grounds through the MyCUHealth portal.

The CU Boulder campus is currently mask-optional. However, if public health conditions change and masks are again required in classrooms, students who fail to adhere to masking 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 Student Conduct and Conflict Resolution. For more information, see the policy on classroom behavior and the Student Code of Conduct. If you require accommodation because a disability prevents you from fulfilling these safety measures, please follow the steps in the "Accommodation for Disabilities" statement on this syllabus.

If you feel ill and think you might have COVID-19, if you have tested positive for COVID-19, or if you are unvaccinated or partially vaccinated and have been in close contact with someone who has COVID-19, you should stay home and follow the further

guidance of the Public Health Office (contacttracing@colorado.edu). If you are fully vaccinated and have been in close contact with someone who has COVID-19, you do not need to stay home; rather, you should self-monitor for symptoms and follow the further guidance of the Public Health Office (contacttracing@colorado.edu).

Please notify me ASAP if you have to miss class due to illness.

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</u> website. 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.

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 <u>Honor Code</u>. Violations of the Honor Code may include, but are not limited to: 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 Student Conduct & Conflict Resolution (honor@colorado.edu); 303-492-5550). Students found responsible for violating the <u>Honor Code</u> will be assigned resolution outcomes from the Student Conduct & Conflict Resolution as well as be subject to academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found on the Honor Code website.

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation

CU Boulder is committed to fostering an inclusive and welcoming learning, working, and living environment. University policy prohibits sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, protected-class discrimination and harassment, and related retaliation by or against members of our community on- and off-campus. These behaviors harm

individuals and our community. The Office of Institutional Equity and Compliance (OIEC) addresses these concerns, and individuals who believe they have been subjected to misconduct can contact OIEC at 303-492-2127 or email cureport@colorado.edu. Information about university policies, <a href="mailto:reporting.

Please know that faculty and graduate instructors have a responsibility to inform OIEC when they are made aware of any issues related to these policies regardless of when or where they occurred to ensure that individuals impacted receive information about their rights, support resources, and resolution options. To learn more about reporting and support options for a variety of concerns, visit Don't Ignore It.

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.