## Economics 4818-003

Spring 2019

Prof. Xiaodong Liu

Office: ECON 202 Voice: 303-492-7414 Email: xiaodong.liu@colorado.edu Location: HLMS 267 Meeting Times: TTH 11:00 - 12:15 Office Hours: TTH 12:30 - 2:00

Class website: All course materials will be posted on D2L.

# **Course Description:**

This course provides an introduction to the theory and applications of modern econometrics. This course begins by reviewing and extending the statistical material covered in Econ 3818. Following this, students are guided through the principals of regression analysis starting with the simple regression model. Issues in relation to estimation, inference and specification will be explored.

# Text:

Introductory Econometrics: A Modern Approach, (5th edition) by Jeffery M. Wooldridge.

The text is important, as I will follow it closely. Keep up with the readings. It is essential for success in this class.

# **Prerequisites:**

Economics 3818, Introduction to Statistics with Computer Applications, or its equivalent.

# Software:

We will utilize Microsoft Excel for the data analysis in this course. Excel is available in all campus computer labs, including the lab in the basement of the Economics building.

### Assessment:

There will be two midterm exams, a final exam, and periodic problem sets.

- 1. Class participation (10 pts)
- 2. Problem sets (10 pts)
- 3. Midterm exams (25 pts each)
- 4. Final exam (30 pts)

A student can miss two classes. After that, one point will be deducted for each missed class. There will be no makeup exams. A student who misses a midterm due to an excused absence will have the additional weight shifted to the final.

## **Tentative Course Outline (Text chapters are in parentheses):**

- 1. Review of Mathematics and Statistics (Appendices B and C)
- 2. The Simple Regression Model (Ch. 2)
- 3. Multiple Regression Analysis: Estimation (Ch. 3)

## Midterm 1

- 4. Multiple Regression Analysis: Inference (Ch. 4)
- 5. Multiple Regression Analysis: Large Sample Properties of OLS (Ch. 5)
- 6. Multiple Regression Analysis: Further Issues (Ch. 6)

### Midterm 2

- 7. Heteroskedasticity (Ch. 8)
- 8. More on Specification and Data Problems (Ch. 9)
- 9. Multiple Regression Analysis with Qualitative Information: Binary Variables (Ch. 7)

## Final

Please refer to the electronic version of the syllabus for university policies.

### **University Policies**

#### 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 or injury, see <u>Temporary Medical Conditions</u> under the Students tab on the Disability Services website.

#### **Classroom Behavior**

Students and faculty each have responsibility for maintaining an appropriate learning environment. 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. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on <u>classroom behavior</u> and the <u>Student Code of Conduct</u>.

#### 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 (<u>honor@colorado.edu</u>); 303-492-5550). Students who are 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 Honor Code Office website.

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

The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (including sexual assault, exploitation, harassment, dating or domestic violence, and stalking), discrimination, and 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 cureport@colorado.edu. Information about the OIEC, university policies, anonymous reporting, and the campus resources can be found on the <u>OIEC website</u>. Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, 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.