UNIVERSITY OF COLORADO BOULDER
INTRODUCTION TO ECONOMETRICS
ECON 4818 ONLINE SYLLABUS, SUMMER 2025

INSTRUCTOR: DR. XIAODONG LIU

Email **xiaodong.liu@colorado.edu**

Online Office Hours: Wednesdays and Fridays 8:30am-10:00am (and by appointment) using Zoom (zoom link).

INSTRUCTOR BIO

Dr. Xiaodong Liu is a professor of economics at CU Boulder. His research interests are in econometrics and applied microeconomics with a focus on developing estimation and inference methods to evaluate the extent of social, spatial, and strategic interactions among economic agents. He has taught this course for more than 10 years and is still excited about incorporating new technology in the classroom to improve student engagement and learning.

TERM START: June 2, 2024
TERM END: July 27, 2024

COURSE WEBSITE

Canvas is our class website:
- Login using your University of Colorado Boulder identikey and password https://canvas.colorado.edu/
- Under Course List, click "ECON 4818-581: Introduction to Econometrics".
- Note: all email correspondence will be through your CU Boulder email address.
    - *Do not use the Canvas email or messages, it is not checked.*

COURSE DESCRIPTION

The purpose of Econometrics is to develop statistical methods for estimating economic relationships, testing economic theories, and evaluating economic policies. 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 basics of regression analysis starting with the simple regression model. Issues in relation to estimation, inference, and model specification will be explored.

COURSE OBJECTIVES

Upon completion of the course, you should be able to:
- estimate a multiple regression model using the OLS estimator;
- test single or multiple linear restrictions on the parameters of a multiple regression model;
- identify a violation of the assumptions of a multiple linear regression model in an application and explain the consequences of the violation; and
- interpret the results from a regression analysis and discuss their implications in economics.

COURSE PREREQUISITES

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

REQUIRED COURSE MATERIALS

Textbook (required): *Introductory Econometrics: A Modern Approach*, by Jeffery M. Wooldridge.

Course Website: https://canvas.colorado.edu/ (Canvas) Grades and any further additional readings will be posted on Canvas. Please check Canvas frequently for any relevant notifications/changes that may occur throughout the course.

SUPPLEMENTAL READINGS

Supplemental readings and other materials will be provided in Canvas system, via the CU Library electronic reserve, or by links to websites.

INSTRUCTIONAL METHODOLOGY AND DELIVERY

This course is delivered via distance education format using the CU Canvas system. The asynchronous format will use a combination of readings, lecture videos, practice problems, and other web-based resources. Asynchronous learning does not require real-time (or synchronous) interaction; instead, content is available online for you to access when it best suits your schedule, and assignments are completed prior to the deadlines listed in the schedule. You will interact with the instructor and other students using the communication functions provided by Canvas. You will submit assignments using Canvas, email, or through another online system.

COURSE PRESENTATION AND PROCEDURES

There will be 8 modules corresponding to the 8 weeks of the course. You should proceed through one module per week, which will be comprised of readings from the course texts, supplemental class notes, lecture videos, practice problems, quizzes, exams, and various outside sources of information.

COURSE OUTLINE

Review the separate weekly class schedule found on Canvas under "Syllabus" link.

EVALUATION AND GRADING

Course grades will be determined by the completion of assignments, exams, and discussions, as shown below:

Assignment	Frequency	GRADE PERCENTAGE
Quizzes	13	50%
Proctored Midterm Exam	1	20%
Proctored Cumulative Final Exam	1	30%
TOTAL		**100%**

Course Grading Criteria

Grade	Percentage Grade	Indicates
A	93-100	Excellent
A-	90-92.99	
B+	87-89.99	
B	83-86.99	Above Average
B-	80-82.99	
C+	77-79.99	
C	73-76.99	Average
C-	70-72.99	
D+	67-69.99	
D	63-66.99	Below Average
D-	60-62.99	
F	0-59	Failure

There is +/– grading in this class.

Assessments

Quizzes (50%) – There will be Thirteen (13) quizzes. The quizzes include multiple-choices, calculations, short answers, and Excel problems. The format will be open book and open notes. Your lowest one (1) quiz is dropped from your final grade calculation. The quizzes are completed on Canvas.

Exams (50%) – There will be two (2) exams: the proctored midterm exam (20%) and the proctored cumulative final exam (30%). The midterm will be on July 1 (Tuesday) from 1pm-5pm MT. The final exam will be on July 25 (Friday) from 1pm-5pm MT. Each exam is 90 minutes long. You must complete the exams in the above time windows. The exams include multiple-choices, calculations, short answers, and Excel problems. The format will be open book and open notes. You must complete the exam independently and not confer with anyone during it. The exams are completed on Canvas in a proctored setting.

This course requires proctored examinations. Exams are proctored which will require planning on your part. Proctors are individuals who administer the exam process following the guidelines provided by University of Colorado Boulder to ensure academic integrity.

You can take the exam:
1. At **an accredited college or university testing center** in your town or nearby. There may be a cost for using this testing center.
2. With **online proctoring by your instructor** using Zoom (zoom link). Online proctoring uses a webcam and microphone to ensure academic integrity. You must have access to a computer with a webcam and a microphone to use online proctoring.

Please see Canvas for detailed information about proctoring. Please contact your instructor for the contact information for the UTC and a nationwide list of accredited college or university testing centers. If you are in a rural area or on a military base, you may need approval process.

POLICY ON DUE DATES

It is your responsibility to turn in each assignment on the required date. ***Late assignments are not accepted for exams. Quizzes can be turned in up to one day late. The grade penalty for a late quiz is 1 point (out of the 5 total points of a quiz).*** The exceptions that may be considered are due to sickness, university excused function, or circumstances beyond the students' control. The instructor reserves the sole right to determine what grounds constitute a reasonable excuse for missing or submitting a late work assignment and the right to require the student to submit proper verification of such excuse.

EXPECTATIONS OF INSTRUCTOR

I take my role as your instructor very seriously, and, in fact, I care about how well you do in this course and that you have a satisfying, rewarding experience. To that end, it is our commitment to you to respond individually to the work you submit in this class and to return your work in a timely manner. If, however, due to unforeseeable circumstances, the grading of your work takes longer than the times I have listed here, I will keep you informed of my progress and make every effort to return your work with feedback as soon as I can.

COMMUNICATION

E-mail xiaodong.liu@colorado.edu
- All e-mail sent to me should contain the following: Course Name and Number (i.e., ECON 4818), Your Name, Short Description of your question. I will respond to email within 12-24 hours, but usually within 4-6 hours. I always respond to email. If you have not had a response within 24 hours I did not receive the email. Be sure to use your CU email address because sometimes gmail and yahoo email accounts are filtered into my spam folder.

Office Hours
- Online Office Hours: Wednesdays and Fridays 8:30am-10:00am, and by appointment using Zoom ([zoom link](#)).

General Course Announcements
- Announcements: Please check the "announcements" section on Canvas often.

COURSE POLICIES

NETIQUETTE

All students should be aware that their behavior impacts other people, even online. I hope that we will all strive to develop a positive and supportive environment and will be courteous to fellow students and your instructor. Due to the nature of the online environment, there are some things to remember.

1. Always think before you write. In other words, without the use of nonverbals with your message, your message can be misinterpreted. So please think twice before you hit submit.
2. Keep it relevant. There are places to chat and post for fun everyday stuff. Do not stray from the discussion in the assigned questions.
3. Never use all caps. This is the equivalent of yelling in the online world. It is not fun to read. Only use capital letters when appropriate.
4. Make sure that you are using appropriate grammar and structure. In other words, I don't want to see anyone writing "R U" instead of "are you". There are people in the class that may not understand this type of abbreviation, not to mention it does nothing to help expand your writing and vocabulary skills. Emoticons are fine as long as they are appropriate. A smile 😊 is welcome, anything offensive is not.
5. Treat people the same as you would face-to-face. In other words, it is easy to hide behind the computer. In some cases, it empowers people to treat others in ways they would not in person. Remember there is a person behind the name on your screen. Treat all with dignity and respect and you can expect that in return.

6. Respect the time of others. This class is going to require you to work in groups. Learn to respect the time of others in your group and your experience will be much better. Always remember that you are not the only person with a busy schedule, be flexible. Do not procrastinate! You may be one that works best with the pressures of the deadline looming on you, but others may not be that way. The same is true for the reverse. The key to a successful group is organization, communication and a willingness to do what it takes to get it done.

Website: http://www.albion.com/netiquette/corerules.html

Compiled by Melissa Landin, Instructor, Dept. of Communication, Inver Hills Community College, mlandin@inverhills.edu

TECHNOLOGY REQUIREMENTS AND SUPPORT

What are the basic computer specifications for Canvas?
- Visit the official Canvas Computer Specifications Page for the latest list of recommended system requirements.

Which browsers does Canvas support?
- Visit the Supported Browsers Page for the detailed list of internet browsers in Windows, MacOS, iOS and Android.

Skill Requirements
- Students also need to possess basic computer skills, such as:
  - How to use a web browser and word processor
  - How to send and receive email
  - How to locate a file and attach it to an email or upload a file into a course
  - How to copy and paste
  - Must know basic typing skills and keyboard commands
  - Must know basic computer terminology

Technical Support
- Canvas technical support. If you are experiencing issues with Canvas please contact:
  - CU Boulder's Help desk at 303-735-4357 (5-HELP) or help@colorado.edu. 5-Help will answer your call: Monday through Friday from 7:30 a.m. to 7:00 p.m., Saturday and Sunday from noon to 6:00 p.m., Closed during University Holidays
  - On your computer, click the "help" (?) icon on the left side of Canvas, once logged in
  - Within the Canvas App, you can search the Canvas support guides, Report a Problem or chat with Canvas Support 24 hours a day, 7 days a week.

ADDITIONAL SUPPORT SERVICES

A variety of instructional support services, such as the writing center, guidance on personal or educational issues, tutoring questions and library resources are available to the students. For more information about their services, visit their websites linked under modules on Canvas.

COURSE WITHDRAWAL POLICY

Any student who wishes to withdraw from the course must do so by July 8. They must submit a request directly to Continuing Education. For complete information, please visit their website at https://ce.colorado.edu/resources/topics/dates-and-deadlines-general-info/.

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, marital status, political affiliation, or political philosophy. For more information, see the classroom behavior policy, the Student Code of Conduct, and the Office of Institutional Equity and Compliance.

ACCOMMODATION FOR DISABILITIES, TEMPORARY MEDICAL CONDITIONS, AND MEDICAL ISOLATION

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 determine accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the Disability Services website. Contact Disability Services at 303-492-8671 or DSinfo@colorado.edu for further assistance. If you have a temporary medical condition, see Temporary Medical Conditions 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 Honor Code. Violations of the Honor Code may include but are not limited to: plagiarism (including use of paper writing services or technology [such as essay bots]), 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. Understanding the course's syllabus is a vital part in adhering to the Honor Code.

All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution: StudentConduct@colorado.edu. Students found responsible for violating the Honor Code will be assigned resolution outcomes from the Student Conduct & Conflict Resolution as well as be subject to academic sanctions from the faculty member. Visit Honor Code for more information on the academic integrity policy.

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 protected-class discrimination and harassment, sexual misconduct (harassment, exploitation, and assault), intimate partner abuse (dating or domestic violence), stalking, and related retaliation by or against members of our community on- and off-campus. The Office of Institutional Equity and Compliance (OIEC) addresses these concerns, and individuals who have been subjected to misconduct can contact OIEC at 303-492-2127 or email CUreport@colorado.edu. Information about university policies, reporting options, and OIEC support resources including confidential services can be found on the OIEC website.

Please know that faculty and graduate instructors are required to inform OIEC when they are made aware of incidents related to these concerns regardless of when or where something occurred. This is to ensure that individuals impacted receive outreach from OIEC about their options and support resources. To learn more about reporting and support for a variety of concerns, visit the Don't Ignore It page.

RELIGIOUS ACCOMMODATIONS

Campus policy requires faculty to provide reasonable accommodations for students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please communicate the need for a religious accommodation in a timely manner. See the campus policy regarding religious observances for full details.