

Prof. Xiaodong Liu

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Meeting Room: Econ 117  
Meeting Times: TTH 11:00 - 12:15  
Office Hours: TTH 12:30 - 2:00

**Class website:** All course materials will be posted on Canvas.

**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.

**Text:**

*Introductory Econometrics: A Modern Approach*, (7<sup>th</sup> 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 use Microsoft Excel for data analysis in this course.

**Assessment:**

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

1. Problem sets (20 pts)
2. Midterm exams (25 pts each)
3. Final exam (30 pts)

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

**Final**

**University Policies:**

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, 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](#).

Members of the CU Boulder community and visitors to campus must follow university, department, and building health and safety requirements and all public health orders to reduce the risk of spreading infectious diseases.

The CU Boulder campus is currently mask optional. However, if masks are again required in classrooms, students who fail to adhere to masking requirements will be asked to leave class. Students who do not leave class when asked or who refuse to comply with these requirements will be referred to Student Conduct & Conflict Resolution. Students

For those who feel ill and think you might have COVID-19 or if you have tested positive for COVID-

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