

Xiaodong Liu, Assistant Professor

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Location: Economics 119

Meeting Times: MWF 1:00 am – 1:50 pm

Office Hours: MW 2:00 – 3:30 pm

**Class website:** All course materials will be posted on WEBCT/CU Learn.

**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*, (4<sup>th</sup> edition) by Jeffery M. Wooldridge.

The text in the 2<sup>nd</sup> and 3<sup>rd</sup> edition is identical to the 4<sup>th</sup> edition. But some practice problems are missing in the old editions. 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 three classes without excuse. After that, 1 point will be deducted for each missed class. There will be no make up 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: OLS Asymptotics (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:**

University policies regarding classroom behavior are available at <http://www.colorado.edu/policies/classbehavior.html> and at [http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student\\_code](http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code)

Information regarding the University Honor Code is available at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode>. The Honor Code Council can be contacted by email at [honor@colorado.edu](mailto:honor@colorado.edu) or by telephone at 303-725-2273.

University policies regarding disabilities are available at <http://www.colorado.edu/disabilityservices>. Disability Services can be contacted by telephone at 303-492-8671, or in person at Willard 322.

University policies regarding religious practice are available at [http://www.colorado.edu/policies/fac\\_relig.html](http://www.colorado.edu/policies/fac_relig.html).

University policies regarding Sexual Harassment and Amorous Relationships are available at <http://www.colorado.edu/odh/>. The Office of Discrimination and Harassment can be reached by telephone at 303-492-2127. The Office of Judicial Affairs can be reached at 303-492-5550.