

# **Econ 524: Introduction to Econometrics**

Term: Winter 2021

Credits: 4

## Meeting times and locations:

Mondays / Wednesdays 2:00-3:50 p.m.

Remote delivery

Instructor: Professor Schroeder

Office Hours: Mondays and Wednesdays after class, scheduled office hours on Fridays.

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## Required Sources:

Using Econometrics: A Practical Guide, A.H. Studenmund, 7th edition, Prentice Hall.

## Optional Sources:

Introductory Statistics, Neil A. Weiss, 10th edition, Pearson

Introductory Econometrics: A Modern Approach, Jeffrey M. Wooldridge, 7th edition, South-Western College Pub.

Note on textbooks: Earlier editions of Studenmund book are fine to use and are likely to be cheaper options. The Weiss and Wooldridge books are complementary and may be useful (the Weiss book is useful for those with weaker Statistics backgrounds and the Wooldridge book is good for those wanting a more in-depth analysis of some of the econometric topics we cover), but are not required material for the course.

## Student Learning Outcomes:

1. Explain the foundation of regression analysis and why we use it
2. Interpret and analyze regression estimates
3. Estimate economic relationships by implementing regression analysis using data
4. Generate economic hypotheses and execute the appropriate tests of those hypotheses
5. Explain and apply fundamental statistical concepts
6. Use data and regression results to make predictions about economic phenomena

### Grading:

- Quizzes: 20%
- Labs: 15%
- Problem Sets: 15%
- Paper proposal and peer reviews: 10%
- Final Paper: 20%
- Final Exam: 20%

Academic Dishonesty: Plagiarism, fabrication, cheating, and facilitating the academic dishonesty of others are serious offenses and may be punished by failure on the exam or project, failure in the course, and/or expulsion from the university. Refer to the Schedule of Classes for more information on academic dishonesty. Student conduct guidelines can be found at <http://oregonstate.edu/studentconduct/regulations/>

Disruptive Behavior: Behaviors that are disruptive to teaching and learning will not be tolerated, and will be referred to the Student Conduct Program for disciplinary action. Behaviors that create a hostile, offensive or intimidating environment based on gender, race, ethnicity, color, religion, age, disability, marital status or sexual orientation will be referred to the Affirmative Action Office.

Disabilities: Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 737-4098.

Basic Needs: Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Human Services Resource Center (HSRC) for support ([hsrc@oregonstate.edu](mailto:hsrc@oregonstate.edu), 541-737-3747). The HSRC has a [food pantry](#), a [textbook lending program](#) and other resources to help. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources that they may possess.

Week	Topic	Required Reading (Studenmund)	Assignments	Optional reading
1	Introduction to Econometrics	Chapter 1 Chapter 3.1	Lab 1 Quiz 1	Wooldridge, Chapter 1
2	Statistics Overview		Lab 2 Quiz 2 Problem Set 1	Wooldridge, Appendix A Wooldridge, Appendix B Weiss, Chapter 1 Weiss, 3.1 and 3.2 Weiss, Chapter 4.1 – 4.6 Weiss, 5.1 and 5.2 Weiss, 6.1 – 6.3
3	Statistics Applied to Regression Analysis	Chapter 1 Chapter 2.1	Lab 3 Quiz 3	Wooldridge, Chapter 2.1 and 2.2
4	Properties of Estimators	Chapter 4	Lab 4 Quiz 4 Problem Set 2	Wooldridge, Appendix C.1 – C.3 Wooldridge, Chapter 2.5
5	Hypothesis Testing	Chapter 5	Lab 5 Quiz 5 Paper proposal	Wooldridge, Chapter 4 Wooldridge, Appendix C.5 – C.6 Weiss, Chapter 8

				Weiss, Chapter 9
6	Multiple Regression	Chapter 2.2 Chapter 4.1 Chapter 6	Lab 6 Quiz 6 Problem Set 3 Peer review	Wooldridge, Chapter 3
7	Goodness-of-Fit	Chapter 2.3-2.5 Chapter 5.6	Lab 7 Quiz 7	Wooldridge, Chapter 6.3
8	Dummy Variables	Chapter 3.3 Chapter 7.4 Chapter 8.1	Lab 8 Quiz 8 Problem Set 4 Data and Methods section	Wooldridge, Chapter 7
9	Categorical Variables, Panel Data	Chapter 13.1 Chapter 16	Lab 9 Quiz 9 Peer review	Wooldridge, Chapter 14.1
10	Functional Form	Chapter 7.2	Lab 10 Quiz 10 Problem Set 5	Wooldridge, Chapter 2.4  Wooldridge, Chapter 6.2
Finals			Final Exam Final Research Paper	