

University of Colorado at Boulder
Department of Economics

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Economics 4818, term B
Syllabus and Schedule
19 June 2014

Welcome. I am Prof. Jeffrey S. Zax. This is Economics 4818, Introduction to Econometrics.

Course description:

The purpose of this course is to introduce students to the practice of econometric analysis. This introduction includes relatively rigorous training in basic econometric and statistical theory, and practical exercises using Census and simulated data. The successful student should be trained to perform econometric analysis at well above the standards ordinarily encountered in commercial and government practice.

This course requires previous successful completion of Economics 3818, Introduction to Statistics with Computer Applications, or its equivalent. In particular, it assumes that students understand expected values and have some familiarity with confidence intervals and hypothesis tests. This course does not require calculus or linear algebra. However, success is not possible without competence in algebra. In particular, it assumes that students understand summation signs.

The material to be mastered in this course is contained in the lectures, problem sets, computer exercises and textbook. The text for this course is my Introductory Econometrics: Intuition, Proof and Practice. Assignments, answers and other communications are or will be available at the course Desire2Learn website.

This course will meet every week day from Tuesday, 8 July, through Friday, 9 August, from 9:15a.m. until 10:50 p.m. in Economics 119. I will hold office hours on Mondays, Tuesdays and Thursdays between 11:00 a.m. and 12:00 p.m. in Economics 111, my office. Appointments may be possible at other times.

Performance in this class will be judged on the basis of several instruments. The midterm examination will take place during our class on Friday, 25 July. It will take 100 minutes and be worth 100 points. The final examination will take place during our last class, on Friday, 8 August. It will take 100 minutes and be worth 100 points. Ten problem sets will be assigned according to the tentative schedule below. Each problem set will be worth 20 points. The ten problem sets together will be worth 200 points.

Problem sets will typically consist of problems from the text. Quiz and exam questions may also come from the text, or will be similar to problems in the text. Solutions to the quizzes and problem sets will be available on the course website soon after they are due.

The course as a whole will be valued at 400 points. The score attained by each student, evaluated relative to the score that would be attained by an intelligent student of econometrics at this level, will determine final letter grades.

Tentative lecture schedule:

<u>Topic</u>	<u>Readings</u>	<u>Tentative Dates</u>
What is a regression?	Text, chapter 1	8 July
Introduction and math prerequisite	Text, chapter 2	9 July
Covariance and correlation	Text, chapter 3	10 July
Fitting a line	Text, chapter 4	11, 14 July
From sample to population	Text, chapter 5	15-17 July
Confidence intervals and hypothesis tests	Text, chapter 6	18, 21 July
Inference in OLS	Text, chapter 7	22, 23 July
Non-zero expectations and heteroskedasticity	Text, chapter 8	24 July
Midterm examination		25 July
Autocorrelation	Text, chapter 9	28 July
Endogeneity	Text, chapter 10	29 July
More explanatory variables	Text, chapters 11, 12	30, 31 July, 1 August
Express yourself	Text, chapters 13, 14	4, 5, 6 August
Categorical dependent variables	Text, chapters 15	7 August
Final Examination		8 August

Tentative homework schedule:

<u>Topic</u>	<u>Tentative Dates</u>
Chapters 1, 2	10 July
Chapters 3, 4	15 July
Chapter 5	18 July
Chapter 6	22 July
Chapter 7	24 July
Chapters 8, 9	29 July
Chapter 10	31 July
Chapters 11, 12	4 August
Chapters 13, 14	7 August
Chapter 15	8 August

University policies:

The University adheres to the standards for student privacy rights and requirements as stipulated in the Federal Rights and Privacy Act (FERPA) of 1974.¹ Campus policy regarding disabilities requires that faculty adhere to the recommendations of Disability Services. In addition, campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly accommodate all students who, because of religious obligations, have conflicts with scheduled examinations, assignments or required attendance. Any student eligible for and needing academic adjustments or accommodations because of disability or religious practice should arrange to meet with me immediately. Those with disabilities should immediately submit a letter from Disability Services describing appropriate adjustments or accommodations.²

¹ A summary is available at http://registrar.colorado.edu/regulations/ferpa_guide.html.

² University policies regarding religious practice are available at http://www.colorado.edu/policies/fac_relig.html. 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.

Students and faculty share responsibility for maintaining an appropriate learning environment. All are subject to the University's policies on Sexual Harassment and Amorous Relationships.³ Students who fail to adhere to appropriate behavioral standards may be subject to discipline. Faculty have the professional responsibility to treat students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which students express opinions.⁴ I am happy to discuss any issues of individual or group treatment in office hours or by appointment.

All students of the University of Colorado at Boulder are responsible for knowing and adhering to this institution's policy regarding academic integrity. Cheating, plagiarism, fabrication, lying, bribery, threatening behavior and assistance to acts of academic dishonesty are examples of behaviors that violate this policy. Ordinarily, a student engaged in any act of academic dishonesty will receive a failing grade for the course. In addition, all incidents of academic misconduct shall be reported to the Honor Code Council. Depending on its findings, students who are found to be in violation of the academic integrity policy will be subject to non-academic sanctions, including but not limited to university probation, suspension, or expulsion.⁵

³ 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.

⁴ 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

⁵ The Honor Code Council can be contacted by email at honor@colorado.edu or by telephone at 303-725-2273. Additional information regarding the University Honor Code is available at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>.