

University of Colorado at Boulder
Department of Economics

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Economics 4818
Syllabus and Schedule
9 January 2009

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. 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 the draft of my Introductory Econometrics: Intuition, Proof and Practice, referred to in the schedule as “text”. Photocopies of this text are available at the UMC bookstore. The text, assignments, answer keys and other communications will be available at the course website:

<http://www.colorado.edu/Economics/Zax/Econ4818/spring09/webpages/econ4818.html>.

This course will meet on Tuesdays and Thursdays from 2:00 p.m. until 3:15 p.m. throughout the semester in Economics 119. I will hold regular office hours between 1:00 p.m. and 2:00 p.m. and between 3:30 p.m. and 4:00 p.m. on Tuesdays and Thursdays in Economics 111, my office. Appointments can be made for meetings at other times, if these are inconvenient.

Performance in this class will be judged on the basis of several instruments. The final examination will take place on Saturday, 2 May, from 7:30p.m. –10:00p.m. It will require the full 2.5 hours and be worth 150 points. Any student who has three or more final examinations scheduled on 2 May has the right to reschedule all exams following the first two. Any student wishing to invoke this right must do so by 20 February.

A 75-minute midterm examination, worth 75 points, will take place on 10 March. A 25-minute quiz, worth 25 points, will take place on 14 April. Problem sets will be usually be assigned weekly. They will typically consist of problems from the text. All problem sets together will be valued at 150 points. Solutions to the midterm examinations and problem sets will be available on the course website soon after they are due.

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

Tentative schedule:

<u>Topic</u>	<u>Readings</u>	<u>Tentative Dates</u>
What is a regression?	Text, chapter 1	13, 15 January
Introduction and math prerequisite	Text, chapter 2	20, 22 January
Covariance and correlation	Text, chapter 3	27, 29 January
Fitting a line	Text, chapter 4	3, 5, 10 February
From sample to population	Text, chapter 5	12, 17, 19 February
Confidence intervals and hypothesis tests	Text, chapter 6	24, 26 February
Inference in OLS	Text, chapter 7	3, 5 March
First midterm examination		10 March
Non-zero expectations	Text, chapter 8	12 March
Heteroskedasticity	Text, chapter 9	17, 19 March
Autocorrelation	Text, chapter 10	31 March, 2 April
Endogeneity	Text, chapter 11	7, 9 April
Quiz		14 April
More explanatory variables	Text, chapters 12, 13	14, 16, 21 April
Express yourself	Text, chapters 14, 15	23, 28 April

Categorical dependent variables

Text, chapter 16

30 April

Final Examination

Saturday, 2 May, 7:30p.m.
–10:00p.m.

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

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,

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.

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

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

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/>.