University of Colorado at Boulder
Department of Economics

Prof. Jeffrey S. Zax   **Economics 4818**
zax@colorado.edu   **Syllabus and Schedule**
303-492-8268   **11 August 2008**
http://www.colorado.edu/Economics/Zax

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

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, <u>Introduction to Statistics with Computer Applications</u>, 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 <u>Introductory Econometrics: Intuition, Proof and Practice</u>, 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/fall08/webpages/econ4818.html.

This course will meet on Mondays, Wednesdays and Fridays from 10:00 a.m. until 10:50 a.m. throughout the semester in Economics 119. I will hold regular office hours between 2:00 p.m. and 3:30 p.m. on Mondays and Wednesdays in my office, Economics 111. 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 Monday, December 15th, from 10:30a.m. –1:00p.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 15 December has the right to reschedule all exams following the first two. Any student wishing to invoke this right should do so prior to the Fall Break. However, given the

early hour of the final examination in this course, it is unlikely that anyone is eligible to reschedule this examination.

Two 50-minute midterm examinations, each worth 50 points, will take place on 26 September and 31 October. 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:

Topic	Readings	Tentative Dates
What is a regression?	Text, chapter 1	25, 27 August
Introduction and math prerequisite	Text, chapter 2	27, 29 August
Covariance and correlation	Text, chapter 3	3, 5 September
Introduction to SAS		8, 10 September
Fitting a line	Text, chapter 4	12, 15, 17 September
From sample to population	Text, chapter 5	19, 22, 24 September
First midterm examination		26 September
Confidence intervals and hypothesis tests	Text, chapter 6	29 September, 1 October
Inference in OLS	Text, chapter 7	3, 6, 8 October
Non-zero expectations	Text, chapter 8	10, 13 October
Heteroskedasticity	Text, chapter 9	15, 17, 20 October
Autocorrelation	Text, chapter 10	22, 24, 27, 29 October
Second midterm examination		31 October

Endogeneity	Text, chapter 11	3, 5, 7, 10, 12 November
More explanatory variables	Text, chapters 12, 13	14, 17, 19, 21 November
Express yourself	Text, chapters 14, 15	1, 3, 5, 8 December
Categorical dependent variables	Text, chapter 16	10, 12 December
Final Examination		Monday, 15 December, 10:30a.m. –1:00p.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 polices 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

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

[2] University polices 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.

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, assistance to acts of academic dishonesty, fabrication, lying, bribery, and threatening behavior are examples of behaviors that violate this policy. All incidents of academic misconduct shall be reported to the Honor Code Council. Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions, including but not limited to university probation, suspension, or expulsion.[5]

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[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/.