University of Colorado at Boulder Department of Economics

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Economics 4838 Syllabus and Schedule 5 February 2007

Welcome. I am Prof. Jeffrey S. Zax. This is Economics 4838, <u>Microcomputer Applications in Economics</u>.

Course description:

The purpose of this course is to introduce students to applied statistical and econometric analysis. This introduction consists of a survey of many basic statistical and econometric techniques, illustrated by computer exercises using the SAS statistical package. The successful student should be trained to use SAS and perform econometric analysis at well above the standards ordinarily encountered in commercial and government practice.

This course requires previous completion of Economics 3070 and at least one of Economics 1088, Math 1081 or Math 1300. Prior completion of Economics 3818 is recommended but certainly not required. Success requires basic competence in algebra. In particular, this course 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 principal text for this course is <u>Applied Statistics and the SAS</u> <u>Programming Language, Fifth Edition</u>, by Ronald P. Cody and Jeffrey K. Smith, published by Prentice Hall. This text is available for purchase at the UMC bookstore. Additional readings, lecture notes, assignments, answer keys and other communications will be available at the course website,

http://www.colorado.edu/Economics/Zax/Econ4838/administration/econ4838.html.

This course will meet on Tuesdays and Thursdays from 12:30 p.m. until 1:45 p.m. throughout the semester in Humanities 1B45. I will hold regular office hours between 2:15 p.m. and 3:45 p.m. on Tuesdays and Thursdays 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 Tuesday, 8 May, from 4:30p.m. until 7:00 p.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 that date has the right to reschedule all exams following the first two. Any student wishing to invoke this right should do so at the earliest possible time.¹

Four 25-minute quizzes, each worth 25 points, will take place during the last 25 minutes of classes on 6 February, 27 February, 13 March and 10 April. Problem sets, assigned throughout the semester, will be valued at 150 points. Solutions to the quizzes 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 applied statistics and econometrics at this level, will determine final letter grades.

<u>Topic</u> Introduction	<u>Readings</u> Text, chapter 1	<u>Tentative Dates</u> 16 January
A SAS Tutorial	Text, chapter 1	18, 23, 25 January
Describing Data	Text, chapter 2	30 January, 1 February
Analyzing Categorical Data	Text, chapter 3, except for sections J and K, pages 93-95	6, 8 February
First Quiz		6 February
Working With Date and Longitudinal Data	Text, chapter 4	13, 15, 20 February
Correlation and Simple Regression	Text, chapter 5	22, 27 February, 1 March
Second Quiz		27 February
Multiple Regression Analysis	Text, chapter 9	6, 8, 13 March
Third Quiz		13 March
The SAS Input Statement	Text, chapter 12	15, 20 March

Tentative schedule:

¹ University policies regarding multiple final examinations on the same day are available at <u>http://www.colorado.edu/policies/final_exam.html</u>They stipulate that examinations scheduled after the first two on any day may be rescheduled.

External Files	Text, chapter 13	22 March, 3 April
Data Set Subsetting	Text, chapter 14	5, 10 April
Fourth Quiz		10 April
Working With Arrays	Text, chapter 15	12, 17 April
A Review of SAS Functions	Text, chapter 17	19 April
Extended regression exercises	Proc Probit	24, 26 April, 1, 3 May
Final Examination		Tuesday, 8 May, 4:30p.m7:00 p.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 1974.² 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.³

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.⁴ Students who fail to adhere to appropriate behavioral standards may be subject to discipline.

² A summary is available at <u>http://registrar.colorado.edu/regulations/ferpa_guide.html</u>.

³ University policies regarding disabilities are available at <u>http://www.colorado.edu/disabilityservices</u>. Disability Services can be contacted by telephone at 303-492-8671, or in person at Willard 322. University polices regarding religious practice are available at <u>http://www.colorado.edu/policies/fac_relig.html</u>.

⁴ University policies regarding Sexual Harassment and Amorous Relationships are available at <u>http://www.colorado.edu/odh/</u>. 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.

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.⁵ 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.⁶

⁵ University policies regarding classroom behavior are available at <u>http://www.colorado.edu/policies/classbehavior.html</u> and at <u>http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code</u>

⁶ 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 <u>http://www.colorado.edu/policies/honor.html</u> and at <u>http://www.colorado.edu/academics/honorcode/</u>.