University of Colorado at Boulder Department of Economics

Prof. Jeffrey S. Zax zax@colorado.edu 303-492-8268 Economics 4818, term B Syllabus and Schedule 10 June 2012

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! (Astronometric 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 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 <u>Introductory Econometrics: Intuition</u>, <u>Proof and Practice</u>. Assignments, answers and other communications are or will be available at the course website:

http://www.colorado.edu/Economics/Zax/Econ4818/summer12/webpages/econ4818.html.

This course will meet every week day from Tuesday, 10 July, through Friday, 10 webpalgiow Mark Dinony

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:

Topic What is a regression?	Readings Text, chapter 1	Tentative Dates 10 July
Introduction and math prerequisite	Text, chapter 2	11 July
Covariance and correlation	Text, chapter 3	12 July
Fitting a line	Text, chapter 4	13, 16 July
From sample to population	Text, chapter 5	17-19 July
Confidence intervals and hypothesis tests	Text, chapter 6	20, 23 July
Inference in OLS	Text, chapter 7	24 July
Non-zero expectations and heteroskedasticity	Text, chapter 8	25 July
Autocorrelation	Text, chapter 9	26 July
Midterm examination		27 July
Endogeneity	Text, chapter 10	30 July
More explanatory variables	Text, chapters 11, 12	31 July, 1 and 2 August
Express yourself	Text, chapters 13, 14	3, 6, 7 August

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 aÀo adhere to a