ECO 341K **Introduction to Econometrics**
University of Texas

Homework Assignment #1 (due January 30, 2:00 p.m.)

Written problems:

Wooldridge: Chapter 1, Problem 2
Chapter 2, Problem 4

Computer problems (show any relevant Stata output):

Wooldridge: Chapter 1, Computer Exercise C2

For the same dataset (BWGHT.DTA), also answer the following questions:

(vi) The variable *bwght* gives the birthweight of the baby (in ounces). What is the difference in average birthweight between smoking mothers and non-smoking mothers?

(vii) Which of the following variables has the highest correlation (in magnitude) with *bwght*: family income, mother's education, or number of cigarettes smoked per day? Do the signs of the correlations make sense?

(viii) If birthweight is measured in pounds rather than ounces (*bwghtlbs* in the data), how would your answer from (vi) change? how would the correlation values in (vii) change? how would the *covariances* of the various variables in (vii) with *bwght* change? (You should be able to answer these without doing it in Stata.)

Not to be turned in:

Play around with Stata and get more comfortable with it.

Look through Appendices A-C of Wooldridge to make sure you are up to speed with the math/prob/stats. I'll go somewhat slowly through any necessary prob/stats material as it is introduced in the course, but I will assume that you know the math (partial derivatives, logarithms, etc).