Spring 2011 - STAT 515 – Project -- Part I
The Analysis of Two Related Variables

The eventual goal of this assignment is to analyze two quantitative variables (that may be related to each other) to see if you can predict one from the other. The data set should consist of a set of individual people or things (say, 25 or more) *on which two variables have been measured*. The data can either be from a sample, a survey, or an experiment. They may be real data you found in a published source (not the textbook, and not one that has already analyzed the data!) or may be data you gathered yourself. They may be data related to a master's or senior honors thesis, but may not be data from a previous statistics course. Both variables need to be continuous (or at least have a *large number* of different levels if discrete).

For this preliminary part, you should describe in a brief paragraph: (1) the individuals in your sample; (2) how you will obtain the data; and (3) which two NUMERICAL variables will be measured or observed for each individual. This part is due by March 17, 2011.

Also, as a guide, please fill out the following table with a "hypothetical data set" for your chosen individuals and variables. These should not be the actual data that you will be working with! These are just values that you imagine your variables might take for the different individuals in your data set:

	Variables	
	X (put variable name in words)	*Y* (put variable name in words)
Individual 1		
Individual 2		
Individual 3		
Individual 4		
Individual 5		
Individual 6		
Individual 7		
Individual 8		
.	.	
.	.	
.	.	
Individual 23		
Individual 24		
Individual 25		

Once you have filled in this hypothetical data table with fake data values, ask yourself:
- Are the data values all numerical? If not, reconsider the variables you will be using.
- Are both variables continuous? If so, good.
- If one or more variables are discrete, is there a large variety of different levels (values) for the variable(s) in the data set? If there are only a few levels, reconsider the variables you will be using.

Grading:
The project is mandatory for graduate students. It will be graded out of 30 points, of which this preliminary part is worth 5 points. As an encouragement for working in groups, you will get 2 bonus points if you work in a group of two or three people. When working in groups, each member should contribute significantly to the project. The project is *extra credit* for undergraduate students. Undergraduates choosing to do the project will have 18% of their project grade (i.e., the grade out of 30) added to their final exam score.