

## ***Biol. 254 PROJECT #1 - DESCRIPTIVE STATISTICS***

Name \_\_\_\_\_ Section \_\_\_\_\_

A. The first part of this assignment (20 pts) is to select a basic science or clinical science primary literature paper that reports the descriptive statistics of a human continuous or discrete variable according to a categorical variable. Enter the data for your paper on the “Reserve Paper” list. Papers are reserved on a first-come, first-serve basis.

1. From your paper, select a continuous/discrete variable that has descriptive statistics in two categories. On the back of this page, (1) identify the overall goal of the research, and (2) explain why the chosen variable was important to the goal. (2 pts)

2. Fill in table. (8 pts; 1 pt/ea)

	Categorical variable	Cont/discrete variable
Variable name		
Measurement scale		
Variable type		
Meas. units (if app.)		

3. From your paper, fill in table with the values of the descriptive statistics for the continuous/discrete variable in each category. Do not visually estimate values from a graph. (8 pts; 1 pt/ea)

	Value of categorical variable =	Value of categorical variable =
Mean		
SD or SE		
N		

4. Support your answers with a PDF of the Title page and the pages of the Results section that contain the descriptive statistics you reported in A3. Circle or highlight each statistic in A3 on your paper. Do not mark anything else and do not attach the entire article. (2 pts)

B. The second part of this assignment (20 pts) is to measure a continuous or discrete variable and a categorical variable on volunteer human subjects. The categorical variable should have two possible values. Minimum sample size for each category is 15. You must design your project and analyze your data without assistance from others; however, you may enlist help from others to physically help you collect data (do not collect your data via a questionnaire). Enter your continuous/discrete variable on the “Reserve Paper” list. Variables are reserved on a first-come, first-serve basis.

1. From your data, fill in table. (4 pts; ½ pt/ea)

	Categorical Variable	Cont/discrete Variable
Variable name		
Measurement scale		
Variable type		
Meas. units (if app.)		

2. From your data, fill in table with the values of the descriptive statistics for the continuous/discrete variable in each category. Support your results by circling or highlighting each statistic on your SYSTAT output. (8 pts; 1 pt/ea)

	Value of categorical variable =	Value of categorical variable =
mean		
SD		
N		

3. Prepare a SYSTAT graph that portrays the descriptive statistics (mean, SD, n) for the continuous/discrete variable in each category. (8 pts)

4. Staple your pages together in this order: (1) project pages; (2) primary literature paper; (3) SYSTAT output; and (4) SYSTAT data file. Place in assignment box in S161.

**LATE ASSIGNMENTS WILL NOT BE ACCEPTED**