

### MA155 Projects

First Name \_\_\_\_\_

Last Name \_\_\_\_\_

#### **Project 2: Descriptive Statistics**

**Due Date:** xx/xx/xx @ xx p.m. on Canvas

#### **Instructions:**

Use your Project 1 data set that has a sample size of 50 to complete this project.

1. **(x points)** Construct a frequency distribution (round your percentages to the nearest whole number) for “sex” in excel (Watch this video first: [add your video](#)).

Use your excel results/output to complete the table below. Compare the percentages for males and females.

**Table 1: Percentage Distribution of Sex of Participants**

| Sex          | Frequency | % |
|--------------|-----------|---|
| Male         |           |   |
| Female       |           |   |
| <b>Total</b> |           |   |

2. **(x points)** Construct a bar graph/chart for “sex” in excel (Watch this video first: [add your video](#)).

Paste your graph from excel here. Make sure to number, title, and label your graph (e.g., Figure 1: Bar Graph/Chart showing Sex of Participants). Provide a brief description of your graph/chart.

3. **(xx points)** Find the mean, median, standard deviation, minimum, maximum, and range of “weight” and “height” by “sex” using the **Data Analysis Tool** in excel. Round all computations to two decimal places (Watch this video to know how to use the Data Analysis Tool in Excel: [add your video](#)). To complete this part of the project, you first need to divide “weight” and “height” into two groups of “sex” that is “Males” and “Females” using the **filter function** in excel (Watch this video to know how to filter observations in excel : [add your video](#)).

Use your excel results/output to complete the table below. Compare the means, medians, and standard deviations of weight and height of males and females.

**Table 2: Summary Statistics of Weight and Height by Sex of Participants**

| Measure            | Weight |        | Height |        |
|--------------------|--------|--------|--------|--------|
|                    | Male   | Female | Male   | Female |
| Mean               |        |        |        |        |
| Median             |        |        |        |        |
| Standard Deviation |        |        |        |        |
| Minimum            |        |        |        |        |
| Maximum            |        |        |        |        |
| Range              |        |        |        |        |

4. **(xx points)** Construct a side-by-side boxplot for “weight” by “sex” in excel. (Watch this video first : [add your video](#)).

Paste your plot from excel here. Make sure to number, title, and label your graph (e.g., Figure 2: Boxplot for Weight by Sex of Participants). Provide a brief description of your plot.

5. **(xx points)** Construct a side-by-side boxplot for “height” by “sex” in excel. (Watch this video first : [add your video](#)).

Paste your plot from excel here. Make sure to number, title, and label your graph (e.g., Figure 3: Boxplot for Height by Sex of Participants). Provide a brief description of your plot.