**Assessment plan/grading scale: Data Analysis project**

**Data Analysis Project: MAT 3312 Spring 21**

**Written Report (12%) *Due: May 10th 11:59pm (double spaced)***

Include a cover page with the title of the research question, your name, class name, and date

Your report should consist of ***4 sections***:

1. **Introduction**

* Background about the research problem
* Statement about what the study evaluated

1. **Methodology**

* Table listing all the variables used in the analyses. The table should include the list of variables and the description of variables name
* Describe what statistical analyses were performed
* Describe why that particular analyses was chosen

1. **Results**

* Describe results and displayed using tables and figures

1. **Conclusion**

* Short paragraph with overall conclusion of the data analysis projects.
* State any future research questions

**Presentation (8%): Due: May:12th 11am-1:45pm (15-20min long)**

* Include a slide with the title of the research question, name, class name, and date
* Provide an outline of the presentation components
* Provide a clear background about the research problem
* A slide with statistical Methodology
* A slide with data description ( information about the dataset)
* A with variables used for analyses ( meaning include a slide with a table of the variables used in the study to conduct the data analysis
* Results section ( result section can include tables, figure, and models from SAS output)
* Conclusion section

**Analyses to consider in your project:**

* Descriptive Statistics ( mean, standard deviation, mode, median, range, Quartiles IQR, count and percentage chapter 2 and chapter 10)
* Graphical analyses ( bar charts, histograms , and scatter plots; chapter 2 and chapter 11)
* Two sample t-test (chapter 8)
* Categorical data analysis ( contingency table and chi-square test chapter 10)
* Regression analysis ( simple linear regression modeling (t-test and F-test, R-square results) and multiple linear regression modeling; Chapter 11)