**MSDS 6370 Class project**

Find a data set (at least 1000 observations) to consider as your original population.

**Task 01**

First, apply stratified method to get the estimates. Then apply another sampling technique (or techniques) to get the estimates for the same parameter. Compare the estimates from both designs. (or from more designs)

**Task 02**

Select 5 different samples (means select a 5 independent samples ) from stratified method and 5 different samples from another sampling technique and calculate 95% confidence interval for the parameter from each sample. What is the percentage that the actual value is in the 95% confidence intervals for each design?

## **Basic Requirements**

Each 2-person project team is expected to give a 10 -15-minute presentation concerning your results and conclusions in Live Session 13. **Each team will submit written results and conclusions**. This is joint work. Each graphic or table should be clearly labeled and discussed in the text. Your SAS code (or R, or Python) should also be included in the appendix. Please include comments in your SAS code (or R, or Python) indicating the purpose of each procedure.

## **Evaluation**

In general, expect the written results and conclusion to be weighed about 80% on content and 20% on organization and presentation.

Your Lab 13 grade will be based on your presentation in Live Session 13.

**Paper Due Date: April 04 (before the live session)**

(Summarize your findings: max 5 pages+ Appendix)

## **Presentation Structure**

Each 2-person team will discuss their results in a 10 -15-minute presentation in Live Session 13. Each team member will give part of the presentation. Submit your presentation as Lab 13 before start of the 13th live session on April 04.

It will not be possible to show all the details in your presentation. Therefore, emphasize your more interesting results and choices.