# MSDA 3060 -Data Visualization and Storytelling

# Spring 2024 – Course Project

# Phase II- Initial Data Analysis

 **The total points for Course Project are 40 points from the total points of the course.**

## Phase II -Initial Data Analysis (Due March 26): 10 points

In this phase, you will submit a word document that presents your initial analysis of the data. Before proceeding, it is important to thoroughly understand your data, including a close examination of the raw data. The document should include, at a minimum:

1. An engaging summary of the most intriguing findings from your analysis, serving as an "elevator pitch." This should be a brief description of the most captivating aspect of your findings, much like a TV station's lead-in to a news broadcast.

2. A minimum of three charts that support your findings, along with additional points or observations about the data.

3. Engaging chart titles: The charts must have descriptive and attention-grabbing titles.

4. Simple charts: Where possible, aim to simplify your charts by using line or bar charts that present one or two variables. This will help to effectively communicate your findings.

Some things to keep in mind:

- Before you start visualizing in your data, take a close look at your "raw data" — either in Excel or the Data Source pane in Tableau — to make sure you understand how your dataset is structured. In particular, watch out for situations where data is shown for multiple different variables (for example, CDC data that shows smoking rates by State, but also by gender, race and age group for each state). You'll want to make sure you're properly filtering your data in Tableau to only show one data point at a time. Otherwise, you may end up double- or triple-counting values and getting charts with hugely inflated values in them.
- Make sure your charts have clear, engaging titles that contain the "takeaway"

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message you want your reader to have rather than a dry, technical description of what the charts are visualizing.

- At this stage in your analysis, it's usually best to stick to clear, simple charts like bar charts and line charts and to only visualize one or two variables. In time, you may want to move into more complex chart types. But trying to make something too complex at this early stage is more likely to lead to errors.
- Show your charts to someone unfamiliar with the data (like a friend or family member) and see if they can understand what you're trying to say.
- Remember, as you progress through the course, if you find your original dataset is not detailed enough to properly complete future assignments, you have the option to supplement it with additional, related datasets. For example, if your original dataset was on measles outbreaks in your area, you could supplement it with school-level statistics on vaccination rates.

**Rubrics:**

| 50% | 50% |
|---|---|
| The charts clearly illustrate key insights from the dataset. Charts have clear, engaging and descriptive titles. | The description clearly and concisely illustrates the most interesting findings in dataset in a way that makes the reader want to learn more. |

**Due Date: Tuesday, March 26th, 2024**