

Data Management Culminating Project

Specific Expectations:

- Pose a significant problem whose solution will require the organization and analysis of a large amount of data
- Apply the tools of the course to design and carry out a study of the problem
- Compile a clear, well-organized, and fully justified report of the investigation and its findings
- Create a summary of your project to present to the class
- Answer questions about your project and justify your reasoning
- Critique the mathematical work of others in a constructive fashion

Process:

1. Proposal: Due February

2. Formally define the problem that you wish to study. Include the source that you will collect your data from, and why this topic is of interest to you. Be sure that your source is reliable, and that your sample is unbiased and significantly large. *Minimum 75 words, typed.*

3. Collected Data: Due

Data must be collected and presented in a case table in Fathom. The printed hard copy of your assignment must also include a description of the sampling technique(s) used to collect the data, histograms of both the dependent and independent variables, a scatter plot of the data, your marked proposal, the information from your proposal presented in a textbox in Fathom, and a complete list of references to be used.

4. Statistical Analysis/Report: Due April

Use both one variable and two variable statistics. Details to follow in class.

5. Hypothesis Testing: Due April

Normal distribution and hypothesis testing. Details to follow in class.

6. Presentation: May

You will be marked on your introduction, conclusion, clarity, creativity, visuals, eye contact, voice, enthusiasm, timing.

7. Peer Critique: June

You will critique a peers statistical analysis and presentation.

Evaluation:

- 5% to Term Work**
- Proposal (1%)
 - Collected Data (1%)
 - Hypothesis Testing (3%)

5% to TIPS - Statistical Analysis (5%)

- 10% to Summative Assessment**
- Presentation (5%)
 - Critique of others (5%)