

Research Project

Project Final

Within this project you must demonstrate five different aspects of a statistical study. The project should be three to five pages in length. You may use either an observational study or a designed experiment. Your instructor must approve your topic of research before you begin.

1. Pose a question that you can answer with data (this must be pre-approved).
2. Explain how you will select the data or design the experiment to gather the data. Give a rationale for your choices.
3. List the data values you obtain and choose an appropriate graphical display for the data. The descriptive methods are to relate to the question that you have asked.
4. Use a hypothesis testing procedure to analyze the data. Give supporting reasons for the choice of the procedure used. Summarize your conclusion in terms of the question that you posed. Include the p-value of the test.
5. The final paragraph should summarize what you have done in the form of a letter to your Grandma or Grandpa, using language that she or he will understand.

% Breakdown

70% Correct work / All
5 parts accomplished

15% Presentation $\left\{ \begin{array}{l} 5\% \text{ Presented.} \\ 5\% \text{ Engaged the class.} \\ 5\% \text{ Understandable.} \end{array} \right.$

15% Hard work / Creativity.
* Measured throughout the rest of the year.