

MAT 152 Statistical Methods I

Final Project Overview

A final project will be conducted in place of a cumulative final exam. Therefore, the final project should address the concepts discussed throughout the course. Your data should be organized and displayed in an Excel spreadsheet or other spreadsheet software approved by the Instructor. All statistical analysis and calculations should be conducted using the spreadsheet. You will present a summary of your study to the class as a presentation using PowerPoint or other approved software. **You are strongly encouraged to review the grading rubric, especially the [10-9] column, before submitting your final presentation and spreadsheet.**

Topic Selection

All students must have an individual project that is relevant to the course. Offensive, explicit, or controversial topics will not be permitted. No two students will be allowed to study the same topic. Speak with the Instructor at least 1-week before the due date, preferably several weeks prior, to obtain approval of your topic. Your instructor will also help narrow a broad topic into a specific analysis appropriate for the course and time constraints.

Sample Data Collection

You are expected to design and conduct an experimental or observational study using the concepts addressed in the course. Data may be gathered through measurements, surveys, or collected from Internet sources. All surveys must have instructor approval prior to use. Sources of second-hand data must be properly cited.

Data Presentation and Analysis

All data must be organized into a spreadsheet. Your spreadsheet must be organized and reflect the procedures conducted in the course labs. Your Instructor should be able to understand the project using the spreadsheet as a stand-alone document.

Data Summary, Descriptive Statistics, and Inferential Statistics

Proper data summary in the form of tables and/or graphs should be constructed in the spreadsheet as discussed throughout the course and practiced in the course labs. Appropriate descriptive and inferential statistics should be calculated using the formulas available in the spreadsheet software.

Conclusions

All tables, graphs, descriptive and inferential statistics should be properly labeled. Notes within the spreadsheet are helpful to explain your thoughts and conclusions. Conclusions based on your analysis must be correct and properly phrased using the concepts and vocabulary learned throughout the course.

Presentation

A presentation summarizing the project, using PowerPoint or other slide show software, will be presented to the class. The presentation should be practiced, appropriate in length as outlined by the instructor, and should discuss all key ideas and conclusions. As appropriate for summary purposes, include tables, graphs, descriptive and inferential statistics created or calculated in the spreadsheet in the slide show. In addition, you should discuss data collection methods, shortcomings or potential errors in the analysis, and ways to improve or opportunities for further study. **Remember to review the grading rubric before submitting your final presentation and spreadsheet.**