

Math 138: Statistics

Final Project Poster and Paper Requirements and Suggestions

Posters: Your poster should be either on large cardboard, which can be obtained at the bookstore, or on large paper, which can be printed on at a few printers on campus and around Salem. I will have easels to display them on, and they can also be displayed on the wall. We will have the posters on display for one class period, possibly longer. During that time, each group will have five minutes to explain their poster. This way, everyone will have a chance to see what other people in the class have done. I hope that some students and faculty from outside the class will come by and take a look too.

Your poster should contain the following:

Required:

- A brief summary of your project
- Graphical and/or numerical summaries of your data generated using Excel or other statistical software packages
- Carefully stated conclusions based on valid statistical inferences, including P -values where appropriate, but *not* entire pages of Excel output
- Attractive design

Optional:

- A brief summary of your sampling technique and/or experimental design
- Possible sources of bias; shortcomings of your experiment
- A sample survey (Blank versions only. Do not display information about individual survey participants!)
- Comments about interesting features of your data
- Possibilities for future research
- Anything else you think will add to your presentation

You should have portions of your poster specifically designed to interest people who have little statistical knowledge, and other portions specifically designed for people who would like to know some statistical details. *You should not include all of your data and conclusions in your poster.* You will most likely have collected too much data to fit neatly, including some data that turned out to not be so interesting. Inconclusive results are not necessarily uninteresting. Pick the few most interesting conclusions you can draw from your experiment, and display them prominently in your poster. I recommend selecting between 3 and 5 conclusions to display.

Papers: Your paper is your chance to explain all the details of your project that would not fit on your poster (as well as everything that did). Everything mentioned above that might go on the poster can go into the paper as well. The main goal of the paper is to give me a

sense of the time and energy you spent on your project, so that you will get proper credit for all the work you have done. If it's not in the poster or the paper, there's no way for me to know that you've done it.

Grading: Your project will be graded on three components:

- (poster) The clarity and validity of your analysis and presentation. I will look for simple and accurate statements and conclusions. Your conclusions should be statistically supported and explained in the context of your experiment.
- (paper) The depth and ambition of your project. I will look at the time you spent gathering and analyzing your data.
- (poster) The attractiveness of your poster presentation. Work spent making your poster look nice will be rewarded.

Above all, have fun!