
Project Day and Presentation Guidelines Statistics 100 Spring 2012

These guidelines will help you prepare for your presentations on project day.

Where and when?

Project day will be May 2 and will be held on 7th floor of the Science Center, from 3:00 to 5:00. We will assemble in the Statistics Department common space outside room 706. Everyone must be present during this two-hour block.

What will happen during the 2 hour block?

Project day will be organized very much like a scientific meeting. Projects will be grouped into clusters of 4 projects, with each cluster containing projects with similar topics. Based on the number of projects, we will have approximately 5 clusters.

During the first hour, each project in a cluster will exhibit a poster describing the team's work and present a 12 minute talk describing the project to the other teams in the same cluster. During the presentation, each team member from the other projects listening to the presentation will rate it using the rating sheet *Statistics 100 Poster Review Comments*; the review sheet is posted on the web with these guidelines. Each listener will complete one sheet per project. There will be time for 3 minutes of questions at the end of each presentation, with questions coming from students listening to the presentations, one of the TFs, or the course head.

During the second hour of the time block, we will hold a general poster session (with refreshments), during which you can visit and learn from all the posters. The specific logistics of the general poster session will be described May 2. There will be no grading done during the general poster session.

What should the poster include?

We recommend using the standard tri-fold poster board (36 in. by 48 in.). The boards are inexpensive and can be purchased at Staples.

It is very easy to overload a poster. Too much detail in long paragraphs are difficult for a reader to digest and often result in small, unreadable fonts. The items below should be included in your poster in brief, bulleted lists in a font no smaller than 18 pt; 20 pt fonts are even better. A helvetica font is often used for posters because of its readability. Headings can be in even larger fonts.

The poster should contain:

- A brief title of the research topic, along with the names of the members of your project team.
- A clear statement of the question you are studying.

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- A summary of your study design, indicating the specific source of the data, the sample size, and how the data were collected.
 - A table showing the summary statistics for the variables in your dataset.
 - Graphical displays useful for understanding the results of your study. The most common types of graphical displays are histograms, bar charts, boxplots and scatterplots.
 - A table that presents results of the main statistical tests you conducted or confidence intervals you calculated. In general, the most common types of statistical analyses are t-tests, chi-square tests, multiple regression or logistic regression. Display only the analyses that are relevant to your conclusions, not all the tests you have done.
 - A bulleted list describing the conclusions of your study.
 - A bulleted list describing the strengths and weaknesses of your project. Weaknesses may be things like a sample size that is too small for definitive conclusions, a survey with a high non-response rate, assumptions that are not met in the data (like Normality), or potential lurking variables that you were not able to measure.

What should be in the oral presentation?

The oral presentation should cover the main points in the poster, in the order in which they appear. Since you will be presenting while standing beside your poster, you may refer to it or point to it for specific results. You will not have enough time to present all the detail in your poster, but with careful thought, you can discuss the most important aspects. Plan to finish the talk with a brief discussion of the implications of your results, touching on the strengths and weaknesses of your work.

Please plan your oral presentation carefully. Each team member should give a distinct part of the presentation. Two members should take no more than 6 minutes each, three no more than 4 minutes each. The best way to do this is first to plan a single, coherent presentation, work out the time for each section, then divide up the presentation. Not surprisingly, one or two short practice sessions can vastly improve the quality of a presentation. Because of the time limitations on the day, no presentation will be allowed to run longer than 15 minutes total.

How will you be graded?

Each student will receive two grades for the project. After project day, the TF you have been working with will grade your poster, and each member of the team will receive the same grade. You will not be graded on the oral presentation, because we expect that many of you will not have done something like this in the past. Your second grade will be based on your comments on the review sheets you complete for other projects.

How will the posters be graded? The following three areas will receive roughly equal weight:

1. *Presentation:* Is the poster attractively presented and well organized? Do the graphics communicate well?

2. *Statistical content*: Does the project incorporate concepts and methods from this course? Are they used appropriately and correctly? For original surveys, was the project well designed?
3. *Subject matter content*: Did you learn something about the subject of the project? Is the project interesting, fun, provocative, compelling, educational, fascinating, etc.?

The course head will grade the Project Review Comments. He will look for comments that are specific to the poster, are constructive, and clearly indicate that you listened to the presentation. Since *Comment Sheets* will be completed separately by each listener, these grades will be for each individual and not shared by team members.

Your final grade for project day will be a weighted average of the poster score (80%) and the score for your review sheets (20%).

On project day, each team will be asked to indicate in writing the contribution of each member to the project, and to sign the description of the contributions.

What should I bring to Project Day?

- Your poster. We will have easels for setting up the posters.
- The signed sheets indicating team member contributions. Please use the template posted on the web site.

We will have copies of the *Comment Review Sheets* to distribute during the day.

General points of advice

- Do not try to squeeze too much into the poster. It will not be readable by those listening to the presentations and will cause confusion.
- With some planning you can include a surprising amount of information in a poster and in a brief talk. Do not digress, and stay away from unimportant details. It is quite common at scientific meetings for investigators to have 12 minutes to present several years worth of research. There is something to be said for a well-crafted sound-bite.
- Please show the same interest in other projects you would like shown in yours. You will learn a surprising amount during project day; the teaching team always does.