

PROJECT REPORT

- I. You are to hand in one project report for your whole group. (Details below.)
- II. *In addition*, each group member should hand in, separately and individually, a short description of
 - i) the role of *each* member in the work of the project group, and
 - ii) what they (the individual student) learned from doing the project.

Guidelines for Project Reports

- Clearly and precisely state the question(s) you are studying. Explain why it is interesting.
- Describe in detail how you obtained your data, and why you chose this method and sample size. (See Preliminary Project Proposal handout to help check that you have included everything relevant, including ethical guidelines and confidentiality if applicable.) Discuss measures you took to try to prevent bias or confounding, and any difficulties you encountered in collecting your data that might have introduced bias or lack of randomness. If your study involved an experiment, give details of your randomization procedure, and any difficulties that resulted in a less than ideal sample (e.g., some plants died; some subjects dropped out; unusual circumstances that might have influenced results).
- Present your data in an organized fashion. (Think carefully about how best to do this.)
- Include graphs that will help display your data informatively; think carefully about what types of graphs are best for your situation.
- Discuss why the method of analysis you have chosen is appropriate. In particular, explain why the model assumptions/conditions for the analysis are satisfied, and any uncertainties about satisfying the conditions. Include any plots that might be appropriate to support your explanation.
- Present your analysis. Be sure to state any null and alternate hypotheses clearly and define any parameters clearly. Explain why you have chosen the analysis (confidence interval, hypothesis test, both, matched pairs, two sample test, etc.) you have used. If you have found a confidence interval, explain why you have chosen the confidence level you did. If you have set a particular alpha level for accepting significance, explain why you chose that alpha level.
- Present your conclusions. Be sure they address the question(s) you asked at the beginning of your report. Be sure to use appropriate language -- for example, remember that a statistical analysis can't "prove" anything; it can

only provide evidence (strong, weak, none) in support of or against something. Be sure to discuss any possible confounding variables or problems with your study that need to be taken into account in interpreting your results.

- Write up your report in an organized, clearly written fashion, using correct grammar, spelling, and punctuation. Be sure graphs are well-drawn and clearly labeled. Be sure that graphs, tables, or figures appear as close as reasonably possible to the writing discussing them.