

Project Proposal

The main purpose of the project proposal is to ensure that you will have a satisfying experience with your project. I use the opportunity to judge whether students have chosen responses and factor levels wisely. When experiments are not successful, it is typically because students have chosen responses that have too much variation and their experiment does not have enough power to detect factor effects.

Problems such as these are often hammered out prior to the proposal phase in discussions between me and the students. I like to formalize this process (but let's not make it too formal) by having students take a couple paragraphs to describe their response (and how it will be measured), their factors and levels and the experimental design. I will review the proposals to see if there are any red flags or judge whether the experiment is sufficiently novel. If there are serious problems with the design, or the experiment seems too simple (e.g., time to boil water as a function of amount of water, initial water temp, etc.), I will ask you to consider another experiment. As always, I will be happy to help you develop ideas for experiments.

Please don't start the experiment until I have had an opportunity to review your proposal. After you turn in your reviews, I will relay comments to you by the next class period. I would not want you to start an experiment that may need revision.

The grade for the project proposal constitutes 20% of your project grade. I base the grade on the originality or ambitiousness of the project rather than the quality of the proposal write-up. Great ideas typically get 19 out of 20 points, good ideas would earn somewhere between 16 and 17. I generally will not accept project proposals that I think would earn anything under 15 points.