Guidelines for Project Proposal

Scientists are frequently asked to write proposals for future work. As an example, when your physics professor wants to carry out research, he or she may need to obtain funds from their university or from a grant from an external source to carry out the work. These funds may be used to pay for equipment, materials, travel costs, salaries for research assistants, etc. After securing the funding, the professor will carry out the research. Finally, he or she will present the research at conferences, in papers, and in reports to the funding agency. But to begin this process, the professor needs to convince the funding agency that if they are awarded a grant or other source of funding, it will be money well spent. Therefore, the first step in many research projects is a formal research proposal.

Throughout this semester, your freshman project group will follow a form of this procedure. You will write a proposal, conduct research (while recording it in your journal) and report on your results in your final presentation and poster.

Therefore, your first assignment is to write a formal project proposal. The project proposal should be a relatively short document (at least two pages) written by the group, describing the planned project for the semester. It is understood that the project may change and develop as the semester goes on, however, before starting work, the group should have a clear statement of their objectives, and a plan for carrying them out. This proposal should convince the reader that this project is interesting, is well-planned, and is feasible to carry out in the semester.

Evaluation

Your proposal will be evaluated on the following criteria:

- It must explain the motivation for the project.
- It must define the terms & concepts to be studied.
- It should include preliminary research to provide background and complete plan for the project. Include important equations or concepts that will be tested. References should be included and properly cited.