## Request for Proposal Project (Mr. Hernandez)

## Task:

You are a large firm who has identified a specific need in the world. It is your task to secure funding to conduct research directed at finding a solution or addressing that need. The need or solution must be related to what we covered in this class this year. To do this, you will write a proposal to a group of investors, outlining your identified need, your research goals, and requesting a specific amount of funding. In addition, three members of your group will present your proposal to a group of investors. Another two members will be on an "approval panel". These team-members will grade each presentation out of 50 points, writing down specific critiques. Based on the grade you give the group and your opinion of the project, you can vote to fund that project or not. If you are unsure of which way to vote, you can vote 'undecided'. Voting will be done anonymously. Each presentation grade will depend on the percentage of the approval panel that agrees to fund the project. Mr. Hernandez will also be voting on the projects based on his own grade of the project and opinion. Groups that agree with Mr. Hernandez will receive an extra 3 points towards their grade, groups that disagree will lose 5 points. Groups that vote undecided will lose 1 point.

Your Funding Request may be no longer than two pages. It will have 4 parts.

- 1. Introduce the problem
- 2. Identify individual aspects of the problem, and how you plan to address them. (Legal, environmental, financial, political, etc.)
- 3. Identify the science involved in your research.
- 4. Itemize what the funding is for (specific budget, as accurate as possible), and the purpose of your solution (profit, make the world better, etc)

Each group will consist of 5-6 people. Your groups are pre-assigned. Each group will consist of:

- Group Leader: I have pre-determined the group leader. The group leader is not allowed to talk during the presentation or funding session. Instead, the group leader is in charge of assigning which task each group member will work on. They are also in charge of assigning how the points will be shared on this project. Extra credit is capped at 10% on this assignment. Group leaders will work with their groups to prepare them to present and secure funding, but once the presentations/funding session begin, leaders must rely on their groups to complete their tasks.
- Presenters: Each group will have 3 people who are to represent the group in front of a group of investors (the rest of the class). You are to make your pitch to the class, first by explaining the need you have identified, and then detailing what you intend to do about it and why you need the amount of money you are asking for. This presentation has to prove the plausibility of your proposal as well as the validity of your science. Explain the science as if you are talking to a group of educated people who know physics, but are not experts on topics in Physics 2. These three people need to be prepared to answer any questions the investors might have.
  - **Panel Members**: Each group will have two panel members. If your group has 5 people, the leader is one of these two. While other groups are presenting, the panel members will be taking notes, writing critiques, and grading that group out of 50 points. If you give a group higher than

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40 points, you should vote to approve funding. If you grade the presentation between 30 and 40 points, you should be undecided. If you grade the group below 30 points, you should vote to deny funding.

## **Grading:**

- Funding Request: 100 pts
  - The written funding request is worth 100 points. A good submission will contain all the
    necessary parts and presenting your ideas in a clear, organized manner. Your itemized
    budget will be reasonable, and you will have a plan that is viable and based on physics
    learned this year in class.
- Presentation: 50 pts
  - The presentation is worth 50 points to the entire group. Your grade will be based on how well you make your pitch, how well you explain the science, and the critiques from other groups.
- Notes/Critiques: 50 pts
  - Each group will turn in a set of notes which includes your critiques of each groups presentation. Having complete notes for each other group will be worth 10 points per group, totaling 50 points. In addition, for each vote that you agree with Mr. Hernandez you will gain 3 extra points. Every time you vote undecided you will lose 1 point. Each time you differ from Mr. Hernandez you will receive -5 pts.
- Funding: 50 pts
  - Your funding grade will be the percentage of voters who approved your project, multiplied by 50 points. Securing approval from Mr. Hernandez will earn you 10 extra points.

Overall points 250, but you may earn extra credit up to a maximum of a 275/250 for an individual group member.