LESSON 23: Project Mission to Mars

Final Project

For a final class project, you will have the opportunity to put together your own mission to explore the red planet! Here is a chance to put all your creativity to work. What do you think is scientifically relevant and deserves a closer look, based on what you’ve learned in the class? Where will you go? How will you get there? What are the potential obstacles? What is new and novel? What is the major science question you are addressing? What kind of data will you generate? What will it cost? What will be the outcomes and benefits? How will your mission proposal stack up against others?

In this project you will:
1. Work in teams, capitalizing on different classmate strengths.
2. Define a mission project complete with science goals, background research, engineering, and technology designs for exploration.
3. At the end of the term, you will give an oral 15-minute team presentation of your project to be peer reviewed and evaluated with recommendations for funding or not.

In order to make sure you progress on the project throughout the semester, you will be given specific milestone deadlines so that you don’t wait till the last minute. This includes an outline of your basic project, assignment of roles for each team member, and verbal consultation with the instructor on feasibility plans.

See if you can be successful in convincing a review panel that your project is worthy of funding. A typical evaluation that your classmates will fill out for each presentation is below:

PANEL EVALUATION (Class Peer Evaluation)
Team roles (defined) __________
Presentation clarity __________
Presentation Delivery __________
Mission Objectives __________
Background __________
Merit __________
Budget __________
EPO (Education Public Outreach) __________
Citations __________

RECOMMEND YES NO

You will be asked to self-evaluate your effort and that of your team members to ensure that the final project grade also reflects each person’s input.