Astronomy Research Mini-Project

Grade value: 30 points (equal to 3 homework assignments).

The goal of this assignment is to become more familiar with the role astronomy plays in the scientific and political communities by exploring some of NASA’s recent missions.

On March 29, you will meet with your group during class for a few minutes. Within your group of 4–6 members, you will each choose a different mission from the following list:

Cassini/Huygens
CALIPSO
Deep Impact
Gravity Probe B
Hubble
International Space Station
Mars Reconnaissance Orbiter
New Horizons
TERRA
TOPEX

Your first task is to research that mission (visit [www.nasa.gov](http://www.nasa.gov)). In a 250-word summary, explain 1. the timeframe of the mission (especially noting if it’s past, present, or future), 2. the goals of the mission, and 3. some of the details of the mission. Bear in mind that you are going to be defending it against the other missions in your group; you want to clearly identify its strengths and weaknesses.

Bring copies (1 to submit, 1 for the of your group members) of your write-up when we reconvene to discuss this on April 7. During that class time, I will ask you as a group to share your missions with each other (spend a few minutes each describing the function of the mission and defending it). After hearing all of the missions for the group, I will ask you to choose the TWO and ONLY TWO that you would be willing to fund if you were in charge. I expect that this will not be an easy decision; these are all valuable missions for their own reasons. Note: if when investigating your mission you become disenthralled with it, you may choose again if BOTH of the following are true: 1. your group OKs it and 2. it is before April 5.

After this discussion, write a half-page (~250 words) on the group’s recommendation. Explain what were the most important aspects of the missions that were selected, as well as the most important aspects of the ones that were not selected. Also mention whether you approve of the group’s recommendations. Finally, based on what you deemed to be important, should we invest in a manned trip to Mars? Why or why not?