**Group Project 2 (Berkeley Grant Proposal Game): Documenting a planetary system**

This game, as implied by the title, was developed at UC Berkeley sometime in the 1960's and 1970's. Versions of it exist in many campuses across the world. The purpose of the game is to summarize the scientific process used in this course and incidentally to give you an idea of where science meets reality.

In this simulation, you are in a scientific research group at a university, and your group, along with other groups at other universities (that is, other groups in this class), is trying to document a recently-discovered planetary system with multiple planets. By an amazing coincidence, hyperdrive has been invented, so your probe can reach this planetary system in a matter of weeks, rather than thousands of years.

- Your group has been awarded enough money to build an interstellar probe, and equip it with as many instruments of your choice as will fit on the payload.

- Your group has been given a guarantee from the National Science Foundation (NSF) for $100,000 to use the various instruments you put on the probe, but each group must write grant proposals in order to spend the money.

**Scientific goals:** Equip a probe for planetary exploration. Determine physical characteristics of the planets in the planetary system.

**Group goal:** To gain more points (prestige) than other groups by equipping the probe, generating successful grants and publishing papers (and being cited by others in their papers). These points, incidentally, count towards the 50 points possible for group project 2.

**Setup:** Form groups of three or four. Choose a university/college name for your group and turn in the roster form. You may add or subtract members as you feel necessary (it would be courteous to notify people you do drop!).

**The play:** There are two phases: probe build and discovery.

In “probe build”, you and your group will decide on what instruments to put on your probe. This will happen on Thursday, May 26. At the end of the period, you will submit a sheet with your university name and an inventory of the instruments you wish to place on the probe (as well as the type of data you expect). There will be further guidelines and assistance to do this.

In “discovery”, the probe is launched, and you and your group will make various moves in order to discover features about the planetary system. Starting Tuesday, May 28 and continuing through Thursday, June 9, you can turn in up to one proposal and one manuscript per night. On Tuesday, June 14, you will be able to do either action continuously throughout the period. More details will follow.