Astronomy Group Project Summer 2012

Purpose: To create a simple, inexpensive, museum-type or web display demonstrating a concept relevant to the science of Astronomy.

Specifics: All images/drawings/text on display must be legible and written for the general public, at the high school level. You will design the display working in groups of three or four. Final display will be presented to the class (by all members of group). Museum-type displays should have the dimensions of approximately 2ft x 3ft. A web display should have at least three sections and at least one of these should be interactive.

Procedure:

- 1. Gather ideas at museums, viewing exhibits, or on the Internet.
- a. Find examples of "good" displays.

b. Think about the reaction from different age groups. What would engage an adult? Children? Do you think the material is educationally valuable or just "kid stuff"?

2. Working in groups of three or four, think of what sort of display you would like to create. To make sure that you have enough time to complete project, we have the following checkpoints for you group to meet:

- a. Abstract and Member Responsibilities (7/18)
 - Each group submits a 2 paragraph (at least) abstract of what ideas they would like to present in the display
 - Outline of the responsibilities of each member of the group plan to accomplish
- b. Detailed Description, Drawings (8/6)
- c. Finished Display & Detailed Presentation Outline (8/15)
- d. Class Presentations (8/21)

Grading Breakdown:

10 points - Assessment of group work (1 page individual writeup) 45 points - Display (each of the following will be equally weighted to determine grade)

- Accuracy, Scientific Content, Clarity, Originality, Quality
- 45 points Presentation (3 parts)
 - Science Background (Key principles and concepts in display)
 - Design (How it involves learning? How does it engage viewer? What grade level is appropriate to understand concepts?)
 - Assessment of Learning (What would be some ways to gauge if viewers are learning from your display? Think of questions to test their understanding. Describe reasoning for choices of questions)

Each member of the group will "grade" the other members according to their effort in the project in a written assessment. This assessment will include a "grade" as well as an explanation of who did what. Be as detailed as possible. Whatever collective grade the display and presentation receive for the group, each member will get a grade equal to their percentage of involvement.

For example, your group's display earns a 40 and presentation earns a 45. Your group members give you a "C+" on your percentage effort towards the group effort (78%). You write a proper assessment of how your group worked together (10 points). Your grade: $10 + (40 \text{ points} + 45 \text{ points}) \times 75 \% = 10 + (85) \times 0.78 = 76.3\% = C$. Note that group participation is very important to your grade; to do well you must be actively involved. This also means you cannot just jump ahead and do everything without input from your group. You must work *together*.