Physics 195 2014 Assignments

Below are the assignments for Dr. Bruce Betts’ 2014 Physics 195: Introduction to Planetary Science and Astronomy class (http://planetary.org/bettsclass) at California State University Dominguez Hills (CSUDH). These are provided for those not enrolled in the class in case they want to see them. They are organized into the online introduction assignment, written assignments, and discussion board assignments. Reading assignments can be found in a separate document at http://planetary.org/bettsclass

NOTES IF YOU ARE ENROLLED IN THE CLASS: if you are enrolled in the class, do not use this document, instead use the online CSUDH Blackboard system that will allow you to submit your assignments as described on the Blackboard system. The assignments as presented on Blackboard have precedence over anything presented in this document including any differences that may occur between the two.

ONLINE INTRODUCTION IN THE BLACKBOARD SYSTEM
Click on Create Blog Entry [in the Blackboard system, not available here] and tell us something about your 1) personality, 2) family, 3) school, 4) town, 5) goals and 6) interest in astronomy.
This assignment is worth 3 points or 3% of your grade. For full credit comment on each of the 6 topics and attach a picture of yourself.

WRITTEN ASSIGNMENTS

Planetary Radio (5 points)
Due Feb. 26
Listen to any episode of the half hour radio show Planetary Radio (http://planetary.org/radio). Note there are extensive archives and you can choose an episode of particular interest to you. Write a brief paper (no less than 200 words, no more than 300 words) that summarizes what you heard and what was of most interest to you. Include some of your own thoughts, opinions, and/or reflections.

Random Space Facts (5 points)
Due March 28
Come up with 5 random space facts or trivia questions (and answers) or a combination of both. They can be from any topic related to space. They should be things that you find interesting and that others might as well. At least one of the five should be based upon information you found somewhere other than in lectures or our textbook. The other 4 can come from any source. You should give your source for each of the 5, whether a book, a lecture, a TV show, a web site, or a magazine.
Night Sky Observations (10 points)
Due April 23
Observations of the night sky. Complete the following. START EARLY! Do not wait to start making your observations. Cloudiness will not be accepted as an excuse.

- Observe at least 3 planets in the night sky with your naked eye. You do not need to observe them all on the same night, but you may. Find out where to look from the last few minutes of the most recent Planetary Radio [http://planetary.org/radio], or from any number of web sites or magazines, e.g., [www.skyand telescope.com].
- Observe a fly over of the International Space Station. You will need to register for an account at [http://www.heavens-above.com] as described in the second lecture, or find an alternate web site.
- Observe a fly over of any other satellite (e.g., Hubble Space Telescope) or space “junk” (e.g., a rocket body). Again, you can use [www.heavens-above.com] to predict when and where to look. Important: choose bright satellites to look for, for example brighter than magnitude 3 or even 2 (remember that lower numbers are brighter when given as magnitudes, as they are on the Heavens Above web site).

IF you cannot observe 3 planets, you can observe 2 planets, the International Space Station, and 2 satellites

Either way, there should be a total of 5 objects observed: 2 or 3 planets, the space station and 1 or 2 satellites

For EACH of these observations, list:
- the object observed
- where you were when you observed it (city, state)
- when you observed it (date and time)
- how bright the object was compared to other objects you observed
- what direction or directions (e.g., northwest) you saw the object in, and about how high up in the sky (e.g., 45 degrees, or half way up)

That is a total of FIVE comments for each observation. Record all of your observations in a single report.

Questions (5 points)
Due April 30
Come up with 5 possible test questions for the final. Each question should include at least a question, an answer, and a source (e.g., lecture 5 or Lang, page 20). The questions can be any format, but must include the answer. At least 2 of the five should be based upon material from the book. The others can be from the lecture. The final will be based on Lecture 7 (Jupiter system) through the end of class, so pull your questions from those lectures and the related readings.
DISCUSSION BOARD TOPICS
There are also a series of discussion board topics that are presented to the students as the course proceeds requiring them to start and respond to discussion threads.