

FRONTIERS IN ASTRONOMY — AST 25

Extra Credit Opportunities

About Extra Credit—the Rules

Extra credit is a great way to give your class grade a boost. It is also an opportunity for you to explore subject matter in ways that are impossible in the classroom. Take advantage of this chance!

Each extra credit has an assigned point value that you will receive if you complete the project to my complete satisfaction. Less-excellent projects will be awarded fewer points. All extra credit assignments must be complete—you cannot hand in an incomplete extra credit and hope for partial points.

Rule #1: All extra credit projects must be handed in to me in class, by the deadline indicated on the *General Schedule of Activities*.

Rule #2: You can earn up to 15 extra credit points (equivalent to 5%, or half a grade point).

Rule #3: Point limitations may apply to each type of project. See comments for each extra credit category.

Rule #4: I grade all answers on factual correctness, but also on grammar, logic, and presentation.

Extra Credit #1: Homework overcharge—varies per/semester

Each of the homework assignments is worth a certain number of points. However, some may include extra, optional questions for points. There is no penalty for the wrong answer on such questions.

Extra Credit #2: Literature report—5 points each

Read an online news article (less than 3 months old) with significant content related to the concepts described in this class. The article should be at least 500 words long. Answer the following questions clearly. Each answer should be 30-50 words, although I am not a stickler on this point. Include a hardcopy of the original article with your assignment.

- 1) Summarize the main astronomical/physics content of this article.
- 2) What is a new question, research direction, or experiment that results from this finding?

Good sources for news articles are:

<http://www.space.com/>

<http://www.skyandtelescope.com/>

<http://www.nasa.gov/>

Extra Credit #3: Video—5 points each

I am looking for videos that are suitable for this class. If you think you have found a video that is readily available via retail markets (i.e., Amazon, etc.), and if you think it is likely to be suitable for class, email me its name and a url to a page that describes its content. I will look it over and if I think it looks good, I will give you approval to preview it for class. It is up to you to get your preview copy (via NetFlix, etc.)—I will not reimburse your costs!

After watching it, submit to me a 1-page review of it. Include a description of its length, content, and if you think it is worthwhile for the class. If it turns out to be a dud, I would be happy to hear about it as a warning for something to avoid.

I value scientific accuracy and exploration of topics in as detailed a way as possible. Mindless documentaries that simply show cool special effects may be entertaining, but are not suitable for this class.

Acceptable choices, so far, include

COSMOS (2014 reboot):

- Episode 4: A Sky Full of Ghosts
- Episode 5: Hiding in the Light
- Episode 8: Sisters of the Sun
- Episode 10: The Electric Boy
- Episode 13: Unafraid of the Dark

Extra Credit #4: Your idea

If you have an idea for a different kind of extra credit project, please develop a description and submit it to me. I will discuss the proposal for you, and if it is suitable, will develop guidelines and point value.