ASTR 1020 -- Project Types

You can choose any of the following project types to go along with your chosen project topic. Or you can make up your own creative project! (Song, interpretive dance, you name it.) You should choose a project that matches your skills and that you can do well.

Due Dates:

Outline due on **March 4** at the beginning of lab.
Presentations on **April 15** during lab.
Project due on **April 22** at the beginning of lab.

Project options:

- Paper:
  - Times New Roman, 12 pt font, double spaced
  - 5 full pages, not including citations or title page
    - Don't try to mess with the margins to make your paper appear longer since that will stand out against the other papers.
    - Please do not exceed 6 pages.
  - It should include parenthetical citation (e. g. MLA, APA, Chicago)
    - Put abbreviated citations within your paper, after a sentence/paragraph you paraphrased.
    - Your full works cited should be on an additional page and should be done in the same format as your parenthetical citation.

- PowerPoint Presentation:
  - Your PowerPoint should contain both text and images
    - Use bullet points, not full paragraphs
    - Don't read off the slides, and fill in the words when you present.
  - You should cite your sources on a slide at the end of the presentation.
  - Presentation should last 10 minutes
    - Use as many slides as necessary to accomplish that
    - (most likely about 10 slides)
  - You will be required to present the presentation on Friday April 17st before the end of labs
    - You will also receive the 3 extra credit points for presenting

- Poster + 1-2 page paper:
  - You can do a more hands-on/creative poster AND a 1-2 page "paper" describing your creation that includes any relevant scientific information.
    - 1 page absolute minimum
    - Include everything you would want to say if you presented it in person.
    - Cite your sources in a works cited at the end.
  - Hand in your paper along with your poster.
  - If you choose a poster, make sure it is a larger cardboard poster or the miniature trifold kind.

- Craft/Creative Project + 1-2 page paper:
    - You can do a more hands-on/creative project AND a 1-2 page "paper" describing your creation that includes any relevant scientific information.
        - 1 page absolute minimum
        - Include everything you would want to say about it if you presented it in person.
        - Cite your sources in a works cited at the end.
    - Hand in your paper along with your poster.

    Below is some specific instruction for specific craft/creative project types:

    - *Children's Book:* Writing a children's book does not mean that you can make things up or include less information. You will need a thorough understanding of the material (and some creativity) to accomplish this. You must convey accurate scientific information in a clear, engaging, fun way that a child would enjoy and understand. Do not just list the facts about your topic, try to tell a story that includes that information instead. You should construct the book so that it is easy to open and easy to read (consider your colors carefully). You will be graded on the quality of your book and your ability to convey accurate information. Citations must be included.

    - *Sundial Project:* There are several types of sundials that you can choose to make. Be sure to use materials that will not fall apart easily. You should keep a log of your attempts to use the sundial, at least 10 entries spanning over 2 weeks, recording what time your sundial says and what your watch says. In your 1-2 page paper, you must describe your project, any relevant scientific information (like how and why these work), and some information on the history of sundials. Citations must be included.

<u>Citations</u>:

- Wikipedia does not count. It can be a good place to start in order to get big picture concepts and to get you thinking
- Seek out more reliable sources, like published works
    - scholarly papers, textbooks (such as *The Cosmic Perspective*)
    - science journalism for a general audience - Scientific American, Popular Science, etc.
- Public outreach websites from academic institutions and places like NASA and ESA are good, too, but they shouldn't be your only sources.
- Remember that this is a research project and the quality of your work should reflect that.
- You need to use at least 3 sources in researching your project