

Astronomy e-Portfolio Project

This project involves several components –

- Finding three news items about astronomy
- Commenting upon those items and how they relate to you, society and science
- Providing supporting information if necessary about the items
- Creative output about your own reflections on astronomy and/or science

Before the various components of the project are discussed, here is some information about how you'll get the e-Portfolios put together and what is required in them.

E-Portfolios

You will use UNI's e-Portfolio system to do this project – you cannot use another system. In order to learn how to use the e-Portfolio system, there will be two-hour training sessions specifically for our class on the following days

Monday August 31, 3:00 – 4:50 PM, ITTC Room 134/136 Last name A-L
Wednesday, Sept. 2, 3:00 – 4:50 PM, ITTC Room 134/136 Last name M-Z

If you can't make it to either of these sessions, you will be able to view a video taping of the session on-line from a link at the course website. At these sessions you'll learn how to use the e-Portfolio system to complete this project and also as a resource for your career at UNI.

Finding Astronomy News Items – Library Resources

You will first need to find news items about astronomical findings or discoveries over the course of the semester. There are generally daily news items about astronomy, though if you get all of your news from *The Daily Show*, you will probably miss the majority of them. To help you find news items and to also provide you with valuable tools to help judge the quality of the information that you are viewing, you will be visiting the Rod Library during two class periods for instruction on these topics. These visits will occur during the class period (2:00 – 2:50 PM) on the dates of August 28, September 4 and September 11. So on those dates you will be at either the library or visiting the planetarium in Latham hall – not in the regular class. You will be given a schedule telling you when/where to be on each date.

The information provided by the staff at Rod Library is valuable for not only this class but also for your continued success at the University.

Astronomy News

For the project you need to find **three** different news items that are about astronomy. Here are guidelines concerning the types of news items that are appropriate:

- Items should be about astronomical discoveries or findings that are announced during the semester, which means you can't use anything that was announced before August 24, 2009. Research may take months or years to complete or it could be based upon an event that took place years ago, but was only just recently understood. The date of the news item will determine if it is appropriate to use.
- Items about the Space Shuttle or other items about the mechanics of space flight are *not* appropriate. You need to find items about **new scientific discoveries – new knowledge**. The weekly press release from NASA about the status of spacecrafts or the location of the Space Shuttle is not appropriate. When in doubt, make sure you ask.

Once you've found an article, you will need to place into your e-Portfolio several items of information. The best format in the e-Portfolio system for this would likely be to have all of the information collected into a "binder" which can include items in a hierarchy (main topic, supporting documents, supporting images, etc) or in a sequence. The following are required for each article you use:

- The source of the news items must be fully provided in your information about it, including the title, date, author, organization from which it originated, as well as the news source (newspaper, magazine, news website, etc.). If appropriate include a web-link.
- Summarize **in your own words** what the article is about. If you use a technical or scientific term that you don't define but just copy from the article, you'll lose points. One way of thinking about how to write your summary is to write it as if you are explaining this to someone who is not in the class. If you include any images or graphics from the article, make sure those are properly credited.
- Address the following issues where appropriate (some may not apply to your article)
 - How does this discovery change our current understanding of astronomy/nature/science?
 - What is your impression about the importance of the discovery? Is it significant in your view or sort of run-of-the-mill? Why is the discovery important or not so important? Note: not all news items are "exciting" but are sometimes rather tedious, so don't always expect astounding discoveries to be in every press release.
 - What impact does the discovery have on society's view/humanity's view of the topic? Generally this would only apply to major discoveries that have one of those "big picture" aspects, like extra-terrestrial life, properties of the Universe, etc.
 - Describe the role that technology had in this discovery, if appropriate.

- What aspect of the Scientific Method did the news item address? Was it about an observation or experiment? Did it support or refute a theory or hypothesis? What are the next steps that scientists will need to take?
- You should provide additional information to explain this article or to show how it has changed our views or how it fits into our current understanding of the topic. And as stated previously, any images or other supporting information that you use must be fully and legally referenced.

As with any project or paper that you produce, it is not quantity that is important, but quality.

Additional items to put on your e-Portfolio – Get Creative!

You have with the e-Portfolio system a way of showcasing your knowledge or the depth of your understanding of a topic, be it about your understanding of this course or any other topic. It also provides you with the opportunity to showcase your talents, state your views, or highlight your discoveries. You need to go beyond the assignment that is outlined above to areas that don't have a specific format or guidelines – in other words, **be creative!** This is where the requirement of the “creative output about your own reflections on astronomy and/or science” is needed.

While there are no specific guidelines for this part, you could do any of the following:

- Blog about what you are experiencing in your astronomy course, and how your awareness/understanding has changed.
- Take pictures of astronomical phenomena/objects and post them. This should have full descriptions of what the images are depicting, when and from where the images were obtained, and the equipment used to obtain the images. For example a caption for a astronomy picture could be the following – “Image of the first quarter moon, obtained from Cedar Falls Iowa, September 24, 2009, 8 PM, using a Minolta Supershooter camera”.
- Add artwork or images that are inspired by astronomy, or possibly shoot a video, write a poem, record a song, etc., that you have created based upon an astronomy theme.
- Fact check a science fiction book or movie. This may be harder than it seems, and can only include books/movies that have a strong astronomy theme. So don't do anything about “Twilight”, or slasher movies.
- Or something completely different....

Again, quality and not quantity is the most important aspect of this.

Additional Help

The e-Portfolio system is pretty straightforward and doesn't require users to have any special knowledge in order to use it effectively. However, that might not be enough for some people – they want to do a bit more than what is offered within the e-Portfolio options. For those that want to expand their website design skills, there are many workshops available, and these are offered by ITS for free – you just need to sign up for them. There are also many tutorials available at the ITS website (www.uni.edu/its/et/) on how to use various software packages and utilities. Please check these out or just ask if you need any information about using the e-Portfolio or e-Learning systems.

Timeline

Here's the schedule of activities and deadlines –

Friday August 28 – Go to either the Rod Library or Planetarium during class time

Monday August 31, or Wednesday September 2 – attend an e-Portfolio workshop (3:00- 4:50)

Friday September 4 – Go to either the Rod Library or Planetarium during class time

Friday September 11 – Go to either the Rod Library or Planetarium during class time

Friday October 16 – First news item with all supporting material posted on e-Portfolio (you will be provided with feedback on this to help improve your grade on this).

Friday December 4 – All news items with all supporting material along with “creative” item needs to be on the e-Portfolio system. Nothing posted after this time will be accepted.

Grade

The e-Portfolio project is worth 40 points with the following break-down –

- Each of the three news item and supporting information = 10 points apiece (30 points total)
- Creative endeavor =10 points