Telescopic Topics
Scientific podcast project

Science is filled with important ideas that shape how we understand our world, impact our everyday lives, and even change the way we look at our universe. Often these ideas are swamped in complexity and become difficult to understand unless you are a specialist. Or even worse, they are banal like reading a Wikipedia passage of facts and figures. But there is a tool than can help all of us understand science better...and you've know it your whole life...stories. Therefore, in the project we are going to explore planetary science through telling a story. Combining accuracy with a compelling narrative, we will communicate current, relevant topics.

So, what is a podcast? A podcast is a focused, specific audio piece that relays information effectively to a chosen audience.

We will be researching and writing short (2 minute) scientific podcasts about current topics in planetary science topics for the news hour on the campus radio station KUR. We will recording them in their studios at the end of the semester. The objective is to inform the general public about planetary science, space science, and our solar system. There are lots of mini-assignments and time in lab devoted to successfully accomplishing this project. Ultimately, some of the podcasts will be selected by the radio station manager and played on their news program.

Timeline – Major Deadlines*:

<table>
<thead>
<tr>
<th>Project Piece</th>
<th>Due</th>
<th>Submit what/where</th>
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<tbody>
<tr>
<td>Listen to example narratives, establish assignment</td>
<td>Oct 3\textsuperscript{rd}</td>
<td>In Lab</td>
</tr>
<tr>
<td>Submit preliminary topic for approval for podcast</td>
<td>Oct 12\textsuperscript{nd}</td>
<td>D2L</td>
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<tr>
<td>Revision of topic (if required)</td>
<td>Oct 16\textsuperscript{th}</td>
<td>D2L</td>
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<tr>
<td>Library visit – 1 citation due</td>
<td>Oct 17\textsuperscript{th}</td>
<td>(Lab in Library)</td>
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<tr>
<td>2 Additional Citations and Annotated bibliography due</td>
<td>Oct 24\textsuperscript{th}</td>
<td>D2L</td>
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<tr>
<td>Script 1\textsuperscript{st} Draft Due</td>
<td>Oct 31\textsuperscript{st}</td>
<td>D2L</td>
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<tr>
<td>Peer Review</td>
<td>Nov 7\textsuperscript{th}</td>
<td>In Lab</td>
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<tr>
<td>Small group meeting with Dr. Kraal</td>
<td>Week of Nov 13th</td>
<td>Scheduled during office hours – sign-ups in class</td>
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<tr>
<td>Final Script Due</td>
<td>Nov 21\textsuperscript{st}</td>
<td>In Lab</td>
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<tr>
<td><strong>Record</strong></td>
<td><strong>Nov 28\textsuperscript{th}, Dec 5\textsuperscript{th}</strong></td>
<td>Lab in Radio Station for record times – sign up for specific time in lab</td>
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<tr>
<td>Reflection</td>
<td>Dec 5\textsuperscript{th}</td>
<td>D2L</td>
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*other smaller deadlines will be announced through D2L
Podcast Topic:
You must select a focused subject related in some way to the general content of this course (Planetary science, NASA Missions, Solar System, process of science) for a ~2 minute audio podcast (1:50 – 2:10 is fine). Podcasts over 3 minutes or under 1 minute will not be graded. Within the broad context of planetary science, I encourage you to link to other fields and interests, such as business, government, arts, history. Example topics include:
- Recent scientific results of a space mission
- Upcoming missions
- Stories of interesting and important people/events in planetary science
- Explaining an unusual concept or idea
- A planetary link in art, poem, literature, historical event.

This is a SHORT podcast, so your topic needs to be very focused. If you pick something like the history of rockets, it is too broad and there have been whole BOOKS written on the topic. You need to have a very specific, narrow topic for a successful podcast.

Topics must fall in some way within the definition of the characteristics of science (and outside of the limits – no supernatural beings – sorry Xfilers).

Topics not allowed: Space science related to things outside of our Solar System or Solar System formation (like black holes or galaxy formation), conspiracy theories (e.g. we didn’t land on the moon), how to become an astronaut (you have to be very fit and very smart…), why Pluto isn’t a planet anymore (beating a dead horse), boring ‘profiles’ of already famous people like Neil Armstrong or Albert Einstein.

Pick something that relates to your and/or you think would be interesting to your fellow classmates. You must have your topic signed off on by Dr. Kraal.

When you submit your topic in D2L (it will be listed as a topic selection ‘quiz’ but it will really just be blanks for you to answer these questions – no quiz!)
- What is your topic (in a word or very short phrase)?
- Specifically, how does this topic relate to planetary science?
- What is your idea for ‘telling a story’ with this topic?

Research and References:
Learning how to find and use good resources is an important skill. For this project, you will find three high quality references from different sources/prospective on your chosen topic. You will write a short, annotated bibliography for each of the references that includes a full citation.

You must use accurate, academic sources. Our meeting with the reference librarian will help you make sure that your references don’t break the ‘CRAP’ rule. A key aspect of writing a good script is having interesting, accurate information. This is a mini-research project from that standpoint. Sources that will not be accepted include websites like space.com, cnn.com, ‘regurgitated’ news sites, Wikipedia (and the like), etc.

Podcast scripts will be cited, but you will not read the citation as a part of the script. And all scripts must have a reference list of three high quality sources. All citations must follow the requirements of this assignment and must be accurately referenced. Additional handouts will be provided.
**Script**
Learning to effectively communicate about complex topics is really important and a vital job skill. But it is hard to do because we have to distill complicated information into a focused story. Therefore, we will use this assignment to practice translating scientific information into new stories for a general audience. These audio narratives (podcasts) will be interesting, accurate stories about planetary science. Though short, they will require a lot of revision and attempts. We will be helping each other through careful peer review and practice telling our scientific stories.

Once you have completed your research you will need to write a script for your podcast before you record it. One average, people speak about 100-120 words per minute. Your podcast will be between 2 minutes so you should be looking at something around 250 words. It's not many! Choose carefully. (for example, there are about 100 words in this paragraph!) This script will be run through turn-it-in. You may not plagiarize language (i.e. copy word for word) from ANY website unless you are direct quoting. Cheating/plagiarizing will be dealt with seriously per the syllabus. Your recorded podcast must match your script word-for-word per ADA requirements.

**Audience**
Boring term papers are only seen by tired faculty eyes...what a waste of your creativity and learning! So, for this assignment, you will be recording your podcast in the KUR studios on the Kutztown Campus and the best ones will be used on the campus radio news hour for our 'Telescopic Topics' minutes.

A selection of these podcast will be selected by KUR to be incorporated into their radio news program and will be posted on a blog as a resource to the broader community. As such, your script should be appropriate to a general audience in both level and tone.

**Assessment**
In addition to the specific guidelines associated with assignment parts, your podcast will be assessed on the following criteria

- Is the topic focused and within the assignment parameters?
- Is the content level appropriate for a general audience?
- Is the information presented accurately?
- Is the information presented in an interesting and clear manner?
- Are the references of the appropriate level, support the content, and properly cited?