HNPG 018-004: Poetry for Physicists

Fall 2019, Honors Ignition Seminar (4 units) Prof. Flip Tanedo (PHYS 3054) Office hours: by appointment

Course website: https://sites.google.com/ucr.edu/poetryforphysicists/ Small assignments will be prepared on Google Classroom.

This document: last amended: 9/26

Meeting Times

5:00pm - 6:20pm Tue/Thu from 9/26 until 12/06 Skye Hall 381M

Materials

There are no required texts for the course. Public course materials will be linked from the course website and available on GitHub:

https://github.com/Tanedo/Honors018-2019

Internal course materials will be posted to iLearn.

Course Description

We are surrounded by many forms of communication: fiction and non-fiction; by books, blogs, movies, videos, social media. The information carried by these sources inform us and shape the stories of how we understand our place in the universe.

In this course, we answer: How is technical information communicated to a non-technical audience?

In this ignition seminar, we study examples from science fiction to popular science to understand how we share technical information to different audiences. We explore fiction, short-form non-fiction, videos, conversations, and presentations to develop the *hows* and *whys* of effective science communication. No prior science background is necessary.

Course Objectives

By the end of this course, we will be able to:

- Take a scientific/technical idea and present it to different audiences (expert/general public/children)...
- ... through different media (written, conversational, fictional, graphical, multimedia)
- Identify and use the principles of effective science communication
- Polish key technical communication skills for your success in college and beyond (how to

effectively ask and answer questions, how to write persuasively in technical communications)

Expectations

- As a seminar course, your attendance and participation is a key part of everyone's experience.
- We will maintain a respectful and inclusive environment for one another.
- We will complete all of the course projects.
- We will be welcome the challenges this course; we will support one another with constructive criticism, and will welcome this as an opportunity for each of us to improve.

Assessment and Projects

Your course grade will be based on participation in class, your course projects, and the small assignments.

In this course each student will select a piece of science fiction and research the science incorporated into the story. From this, we will develop a series of pieces:

- A brief *explianer* blog post to describe the science of your short story.
- A graphical representation of the science.
- A tweet summarizing your blog post.
- A short video explaining the science of your short story.
- Creating a professional website

Your grade will be roughly split evenly based on participation in class, short assignments, an the projects.

Schedule

This course runs for 10 weeks. Our tentative schedule is

- 1. Oct 1/3: Reading: the science in science fiction
- 2. Oct 8/10: Writing for real human beings
- 3. Oct 15/17: Writing for really busy human beings
- 4. Oct 22/24: Graphical communication
- 5. Oct 29/31: Academic communication
- 6. Nov 5/7: Performance: giving talks
- 7. **Nov 12/14:** Performance: talking to real human beings
- 8. Nov 19/21: Rhetoric and science: why I deserve an A in this course
- 9. Nov 26: Pop science
- 10. **Dec 3/5:** Succeeding in the academy, course debrief

Inclusive Accommodation, Support

Students who need any accommodations that require my attention should contact me in the first week of class. Students with permanent or temporary disabilities should be sure to make accommodations with th <u>Student Disability Resource Center</u>.

We are committed to an inclusive classroom where our views may be challenged, but where we will always respect each other's dignity and humanity. We each have a responsibility to hold ourselves and one another (including faculty) accountable for maintaining this standard. In the case of any incidents in the classroom, we will (1) find a respectful resolution together, or if this is not possible (2) discuss with the necessary parties outside of the class, or if neither is feasible, (3) reach out to either Help@UCR and/or the Office of the Ombuds.

This Syllabus

This syllabus is subject to change. I reserve the right to amend it as the course progresses.