

Attachment #1 - Homework assignments for Public Understanding of Science course

All emails should be emailed to the teacher the evening before they are due in class.

Assignment #1

How to emphasize the role of science in various topics.

Read: “Curiosity Driven Research” by R.V. Moody

Choose two different potential topics for presentations and brainstorm ideas about how to highlight the role of science, and basic scientific research, in these topics. Summarize your ideas briefly (1-2 paragraphs), and prepare to present one of them in the next class.

Assignment #2

Choose your presentation topic and come up with a catchy title and a 2-3 lines teaser.

Assignment #3

The vast literature about science outreach and public understanding of science examines these issues from many different viewpoints: Is it necessary? Who should do it? Why is it important to scientists? Why is it important to the larger communities? What do people like to hear about? Can they understand it? How does the public perceive science or scientists. Many of these points are represented in the group of papers you are given.

Each student will be assigned a paper and will prepare a short 5-8 minute presentation to the class about the paper’s main take home points. Be prepared to lead a short discussion in class about why (how) this study is relevant to us we prepare and present our topics.

We will discuss one group of papers in each of the coming three classes.

Assignment #4

Read Chapter 1 and 2 in the “Persuasive Messages” book - ***The Importance of Persuasion: The cognitive approach to Persuasion.***

“Persuasion is a process in which a source (persuader) uses a message to achieve a goal by creating, changing, or reinforcing the attitudes of others (the audience). In order to make the audience comply, you need to appeal to the audience’s self interests, and make them want to help you deliver the message.”

Keeping your topic in mind, and based on the discussion in these two chapters, comment on your goals for the talk, and about ways in which you think you can appeal to the audience's self interest.

Assignment #5 – Due in two weeks

Editorial - Based on the papers that were presented in class, write an editorial to a scientific journal, or a letter to the daily paper, or a letter to a legislator (or any other forum that you choose) making a case for science outreach, and suggest possible programs for science outreach to the public.

Assignment #6 - Instructional document

The goal is that the presentations prepared in this course will become part of the program, so that they can be used in the future, and possibly by other presenters. To enable this, each presentations needs to be accompanied with an instructive document that will detail

The goal for your talk (what would be the main points the audience takes home).

The approach to the topic

Misconceptions have encountered, or you expect the audience to have around this issue.

Detailed description below each slide, stating what you intend to say, and highlight the main points of the slide

Resources you used.

Assignment #7

Attend a seminar (a science seminar, a guest lecture on campus, or a lecture about any topic given to the community), and critique the seminar according to our guideline for a good presentation. List all good aspects of the talk, as well as aspects in need of improvement.

Assignment #8

What did I learn from talking to lay-adults?

Please write a short summary of your experience presenting your to adults in the community. Describe your impression of the interaction, and comment on how well you were received, the level of understanding and participation, your feeling about how much they enjoyed your talk, and any special comments you got from the audience.