

2019 ExEL Conference Experiential Education and Learning Across the Disciplines

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HANDOUT: Sensational Experiential Learning in PSYC 3920: Sensation & Perception

ABSTRACT: Students in PSYC 3920: Sensation and Perception were required to complete several hands on science communication assignments. They visited a local science museum to study how science exhibits are created and reflected on how well the exhibited communicated the scientific idea to the public, they evaluate several online science news sites including TED videos, popular science websites, and science themed blogs, and finally they created a hands on demonstration on a topic we covered in class for a homeschool STEM program at the Alvin Sherman Library.

Below are the instructions for the SCIENCE COMMUNICATION ASSIGNMENT that students in class received.

Science Communication Assignments

30% of your grade is based up on your ability to understand the importance of, evaluate the content of, and design good science communication.

SCIENCE EXHIBITS (10% OF GRADE)

One popular way to educate the public about scientific findings is to create installations in museums or public places that explain complex phenomenon in language accessible to a wide-range of people. Typically, these installations include some sort of hands-on demonstration or exhibit explaining the concept. For this assignment, you will visit an exhibit at the Science Museum and note the following in a 2-3 page paper:

- What concept are they demonstrating?
- How well are they doing at communicating to the public?
- What do you think they did well here?
- What do you think needs work?
- What outstanding questions do you have about the topic portrayed in the exhibit?

Include a picture of the exhibit in your paper.

SCIENCE NEWS (10% OF GRADE)

Pick one of the following below (blogging, videos, journalism, book) and write a 2-3 page paper critiquing the popular portrayal of the science.

1. **Science Blogging.** Blogs are a great way for people to talk about topics that interest them. Good bloggers will identify interesting questions to pose and then answer them in an interesting and accessible way. In this assignment, find a science blog of your choice from one of the following websites:
 - Discover Magazine: <http://blogs.discovermagazine.com/>
 - Psychology Today: <https://www.psychologytoday.com/us/blog/index>Read through the archives (at least 10 posts) to get a good feel about what the blog is about. Write a 2-3 page critical review of it. Essentially, describe what the blog is trying to do and how well it is doing it. Give examples to back up your critiques.
2. **Science Videos.** There is a lot of information available in video format for people to learn about new things. For example, YouTube has thousands of videos on topics related to sensation and perception.

However, not all the information is portrayed accurately or interestingly. In this assignment, pick a TED-Ed video in the topic of Psychology > Consciousness, Sensation and Perception found here:

- https://ed.ted.com/lessons?content_type=animations&category=consciousness-sensation-and-perception&direction=desc&sort=publish-date

After you watch the video, write a 2-3 page critical review of the video. Include what the video was about, what you learned, what you thought they did that was helpful to your understanding, anything you would like to see changed in the video, and what outstanding questions you may have about the topic.

3. **Science Journalism.** When a paper is published in a peer-reviewed journal, it may be hard for the public to gain access to the findings, either because the article is behind a paywall or the article is written in jargon. Scientific articles in journals are written assuming their audience has working knowledge of the field. In order to make the research findings more accessible to the public, science journalism seeks to summarize the article in lay terms. Identify one popular science write up of a sensation and perception related finding on one of the following websites:

- Science Daily: <https://www.sciencedaily.com/> (look under [Health & Medicine](#), [Mind & Brain](#), or [Psychology](#) to find relevant articles)
- Neuroscience News: <https://neurosciencenews.com/> (look under Psychology and Neuroscience topics)

Write a 2-3 page paper on what the study was about, what was the hypothesis and rationale, what were the IVs and DVs, what they found, and anything else you found interesting. Then locate the original research study in the journal in which it appeared and compare what was written up on the website with what was reported. Give specific examples of the text for both website and article. Did the popular science write up get it right? What do you think? At the end of your paper, put the URL of the website and the peer-reviewed article in APA style.

SCIENCE OUTREACH (10% OF GRADE)

One way to truly understand a topic is to try to explain it others. In this assignment, you will create an interactive exhibit (either by yourself or in groups of 2 or 3) to present at the Alvin Sherman Library to a group of homeschoolers on the last day of classes.

S.T.E.M. for Homeschoolers

Explore your senses and learn about your brain's activity through hands-on demonstrations involving perceptual illusions. Led by NSU's College of Psychology professor Dr. Boucher and her students, this interactive program will amaze your mind!

When Friday, April 26th — 1:00 pm to 2:00 pm

Where [1st Floor](#) ⓘ

Special thanks to the Office of ExEL and the College of Psychology for funding the class trip to the Museum of Discovery and Science in downtown Fort Lauderdale.