

Poster Instructions

1. Each student will design, construct and present a large-format scientific poster to their peers at the ***Environmental Science Student Symposium, which will take place at the Ohio Union (1739 N High St., Columbus, Ohio) from 8:00 am until 4:00 pm.*** The poster itself will be a large (3-feet x 4-feet) printed document that contains pictures, text, figures, tables, graphs, et cetera that describes one specific topic from the field of environmental science. The poster must include **5 to 10 figures** (illustrations, graphs, tables, photographs, et cetera) that are of high quality and help describe your topic. A **minimum of 10 references** must be used to construct your poster. Your poster should be **designed and written for an audience that includes university students, faculty and professionals.**

The class textbook provides excellent examples of topics (e.g., alternative fuels, electricity generation, resource use, pollution, mining, green architecture, waste water treatment, wildlife management, biodiversity, etc.). In addition, the people that @OSUEnViRo is following on Twitter are an excellent source of information to get you started on a topic.

- a. Several good programs can be used to design large-format posters: **Microsoft PowerPoint**, Apple Keynote, **Apple Pages**, Adobe Illustrator, CorelDRAW, Inkscape, Omnigraffle, Scribus, LaTeX.
 - b. Directions for creating Posters with Microsoft PowerPoint:
<http://hsl.osu.edu/medvis/tutorial/creating-posters-microsoft-powerpoint>
2. The poster dimensions should be between 36 inches (height) x 48-56 inches (width). **Most people prefer 36-inches height x 48-inches length. Posters can be printed on campus at the locations listed below.** I strongly recommend printing the posters at **UniPrint in the Ohio Union because you will receive a discounted rate of \$36.00** to print your poster on foam board. To receive this discount, tell Station 88 that you are printing your poster for Dr. Lower's class and you will need your poster for the Nov. 25th Environmental Science Student Symposium.
 - a. UniPrint in the Ohio Union (\$36 discounted rate):
http://ohiounion.osu.edu/dine_and_shop/station88/about_station_88
 - b. Ohio Union Resource Room:
http://ohiounion.osu.edu/get_involved/student_organizations/resourceroom
 - c. Thompson Library: OIT Computer Lab, Room 160 (247-4577)
 - d. Health Sciences Library:
<http://hsl.osu.edu/service-areas/medvis/services/poster-printing>
 - e. FedEx: <http://www.fedex.com/us/office/index.html>
 3. Each poster should contain the following elements. You can combine these with one another or present them as separate parts of the poster.
 - a. Title of your topic, your name, institution (OSU) and your major department.
 - b. Introduction to the topic or scientific question.
 - c. Abstract (no more than 250 words) summarizing your topic.
 - d. Overview of the environmental issue or problem.
 - e. A minimum of 5 and no more than 12 figures, tables, graphs, graphics, photos, maps, et cetera showing results and/or solutions.
 - f. Summary or conclusion.

- g. References (**at least 10 references required and 5 of these need to be from scientific journals**).
4. Figures, tables and abstract should be designed in such a way that they can stand alone, meaning that they should only require a brief description (e.g., figure caption) or minimal explanation from the presenter. The poster should be designed so that each part (e.g., figures, tables, results, abstract, conclusion) complements the other parts.
 5. Each student should either print their poster directly onto foam board (Dr. Lower recommends doing this) OR bring a mounting board (e.g., foam board, cardboard, plastic board) to attach your poster to during the presentations.
 6. Presenters will be required to stand at their poster for **1 hour** to present their poster to the audience (i.e., students and faculty) and answer questions.
 7. All students will have the opportunity to view the posters and interact with the presenter to learn about her or his project.
 8. In addition to presenting your poster, each student will also be responsible for providing **peer reviews for other posters** from their classmates. You will be assigned several different posters to review by Prof. Lower. You will be given **1 hour** to review these posters during the symposium.
 9. **Poster Reviews and Grading** – poster grades will be based primarily on peer-reviews provided by ENR2100 students. In addition, Prof. Lower and his teaching assistants will also review each of the posters. The student peer-reviews will be based on five criteria (described in a-e below).
 - a. **Presentation (20%)**
Does the presenter have a good understanding of their topic? Was the presenter professional? Did the presenter impress you?
 - b. **Design (20%)**
Does the poster tell a story in a manner that is easy to understand? Does the poster draw the audience in or is it dull and boring? Is the font size big enough to read? Are photographs high-resolution or faded and blurry? Are the graphs and tables nice and neat, easy to understand? Is the poster well organized?
 - c. **Creativity (20%)**
Is the topic important? Is the poster interesting? Is the poster just a copy and paste job from the articles that the presenter read or did she/he put some of her/his own thoughts, ideas and design into their poster?
 - d. **Knowledge (20%)**
Are you convinced that the presenter has a thorough understanding of her/his topic? Did you learn something from the presenter and her/his poster.
 - e. **Content (20%)**
Does the poster contain all the necessary components needed to describe a particular topic to the audience? For example, does the poster have a title, name, introduction, results, and discussion? Does the poster have a conclusion, figures, tables, graphs, etc.? Each poster will be unique and may or may not have all of these parts, but the poster should contain enough parts so that it tells a complete story.

10. You need a **minimum of 10 references** for your poster. At least **5 references need to be from a primary source, which means a scientific journal** (for example, Environmental Science & Technology, Nature, Science and Proceedings of the National Academy of Sciences) **or federally-funded research** (for example, NASA, NOAA, NSF) and the other **5 references can be from well-respected secondary sources** (for example, Columbus Dispatch, Los Angeles Times, National Geographic, New York Times, NPR, PBS, Scientific America, Washington Post). **Use ISI Web of Science or PubMed.gov to find primary sources or visit the websites of the people that @OSUEnViRo is following on Twitter.**

References should follow the styles shown in the examples below.

1. Journal article: Authors, surname first followed by comma and initials of given names. Date in parenthesis. Journal title in italics. Volume number in bold, issue number in parenthesis:page numbers.

Journal article with two authors:

McMurrin, M., & Christopher, G. (2009). *Legal & Criminological Psychology*, **14**(1):101-107.

Journal article with more than two authors:

Post, E., et al. (2009). *Science*, **325**(5946):1355-1358.

2. Online journal article: Should give authors, date of publication in parenthesis and journal or newspaper name in italics, volume number and or page numbers, followed by URL in full – or DOI if known.

Dionne, M.S., Schneider, D.S. (2002) *Genome Biol.* 3:REVIEWS1010.
<http://genomebiology.com/2002/3/4/reviews/1010>

3. Book Chapter: Authors surname first followed by comma and initials of given names. Date of publication in parenthesis. Chapter title, page numbers. Editors of book, book title in italics, city of publication, name of publisher.

Forman, M.S., and Valsamakis, A. (2003). Specimen collection, transport, and processing: virology, p 1227-1241. Murray, P.R., et al. (Eds.), *Manual of clinical microbiology*, 8th ed, Washington, D.C.: Penguin Press.

4. Patent: Name surname first followed by comma and initials of given names. Date in parenthesis. Title of patented item/process in italics. Patent number.

Odell, J.C. (1970, April). *Process for batch culturing*. U.S. patent 484,363,770.

5. Book:

Anderegg, D. (2007). *Nerds: Who they are and why we need more of them*. New York: Jeremy P. Tarcher/Penguin.

6. Magazine article in a database:

Taibbi, M. (2009, September 3). Sick and wrong. *Rolling Stone*, 1086, 58-65.
Retrieved from <http://www.rollingstone.com>

7. Magazine Article in print:

Road map to a great deal. (2009, October). *Consumer Reports*, 74(10), 44-47.

8. Newspaper article in a database:

Moran, S. (2009, September 7). If you don't snooze, you lose: Most Americans aren't getting enough sleep. And for both adults and students, there are health consequences. *Star Tribune*. Retrieved from <http://www.startribune.com/>

9. Newspaper Article in print:

Lucchetti, A. & Craig, S. (2009, September 11). Morgan Stanley taps new boss. *The Wall Street Journal*, pp. A1, A16.

10. Podcast:

Nature (Producer). (2009, July 16). *Moongazing* [Audio podcast]. Retrieved November 5, 2009, from <http://www.nature.com/nature/podcast/index-2009-07-16.html>

11. Video / Movie:

Donner, R. & Lee, S. (Producers), & Hood, G. (Director). (2009). *X-Men Origins: Wolverine* [DVD]. USA: Twentieth Century-Fox Film Corporation.

12. Web Page:

Roszak, T. (1996, September). Why ecology needs psychology, why psychology needs ecology. *Ecopsychology Online*, 1. Retrieved from <http://ecopsychology.athabasca.ca/0996/ecowelcome.htm>

13. Web Page organization / group of authors:

National Museum of American History. (2006, July 7). *National museum of American history displays recent hip-hop acquisitions*. Retrieved from <http://www.americanhistory.si.edu/news/pressrelease.cfm?key=29&newskey=383>

References cited in the body of the poster should appear as a superscript number after the sentence:

Feedlot cattle are susceptible to infections from many pathogenic microorganisms, including those that infect humans.¹ John Odell developed a process for culturing microorganisms in batch cultures.^{4,8,11}

Examples of excellent posters from previous ENR2100 students who participated in the annual Environmental Science Student Symposium:

