Poster Instructions

A scientific poster is an illustrated abstract of research that assists scientists and researchers in presenting their scientific data to larger audiences. Posters are often shown at events such as symposiums, conferences, and meetings, often to show new information to people in differing fields. For this assignment you will be designing, constructing, and presenting a large-format scientific poster a large-format poster. Students enrolled in the in-person section of the course will present their posters in person at the annual Environmental Science Student Symposium. Students enrolled in the online section of the course will present their posters in a virtual version of the Symposium and will NOT be required to print their poster on paper. Your poster should be written for an audience of 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.

You can view previously presented posters at the courses ENR 2100 Poster Day website: http://u.osu.edu/environmentalsciencesymposium/

Several good programs can be used to design large-format posters: Microsoft PowerPoint, Apple Keynote, Apple Pages, Adobe Illustrator, CorelDRAW, Inkscape, Omnigraffle, Scribus, LaTeX. Directions for creating Posters with Microsoft PowerPoint: http://hsl.osu.edu/medvis/tutorial/creating-posters-microsoft-powerpoint

The Scientific Poster Assignment is worth 25% of your final course grade.

You will work on your Poster assignment throughout the semester by completing 5 assignments, which will be graded. These assignments consist of the following:

1. Submit a Poster Title, Abstract and 10 References Quiz online via Carmen. Your abstract should consist of 250-350 words.

2. Submit a minimum of 4 figures that will be added to your poster template online via Carmen. One of these figures must be an original figure. Your poster must contain a minimum of 4 (no more than 10) figures, tables, graphs, graphics, photos, and/or maps. At least one of these figures needs to be an original figure created, modified, or designed by you. Be sure to cite the source for each figure or table. You may create tables/figures by using Excel, for example. You will include the figures, captions, citations and a description of why you chose each of these figures.

3. Submit a Poster First Draft that contains the following elements:
   - Title, your name, address (OSU not your home address), major department.
   - Abstract (250-350 words) summarizing your topic.
   - Introduction and overview of topic or scientific question.
   - Methods & Results – present data and/or methods used to collect data
   - Discussion & Conclusion – pull all of the data together, present your thoughts supported by the data
   - 4-10 figures, with at least one figure being an original figure.
• References (at least 10 references required and 6 of these need to be from peer-reviewed scientific journals)

4. Submit a Poster Final Draft after revisions made possible by comments left by ENR 2100 teaching assistants on your poster first draft and present poster at either the Environmental Science Student Symposium or the virtual symposium if you are enrolled in the online section of the course.

Symposium Directions:

• (In-person) Presenters will be required to stand at their poster for 1 to 1.5 hour to present their poster to the audience (i.e., students and faculty) and answer questions. (Online students will be presenting their posters online, NOT in person)

• (In-person) All students will have the opportunity to view the posters and interact with the presenter to learn about her or his project.

• (Online) Students will be required to record a 3-5-minute audio or video clip of their poster presentation to submit to the virtual symposium for their peers to view and complete peer reviews on.

5. Submit 2-3 Peer Reviews for other posters from your classmates. You will be assigned several different posters to review by Prof. Lower. You will be given 30 min to 1 hour to review these posters during the symposium. The student peer-reviews will be based on the criteria below:

Intellectual Impact of the Poster

1. How well does the article function as a piece of writing (i.e. quality of language, explanation of issue, description of methods, voice)?
2. Is the article scientifically accurate, how has the author demonstrated this to the reader?
3. Does the design, flow and the creativity of the article encourage learning?

Broader Impact of the Poster

1. How well does the poster function as a piece of teaching (i.e. quality of pedagogy, clarity of explanations)? Does the poster tell an organized and detailed story that teaches you something new? Is the poster too general and/or does it lack details that would make the story more educational or easier to understand?
2. Does the poster contain all the necessary components needed to describe the story (i.e., introduction, material & methods, results and discussion) or are things missing that could enhance the topic and what element(s) is missing?

Technical Details of the Poster

1. Has the author included at least ten sources and at least 6 from primary journals?
2. Has the author included at least 4 high-quality figures? Did the author provide a reference for each and every figure? Did the author provide a figure caption for every
figure? Does the author include an original figure? Could the figures be improved, if so how can they be improved?

3. Has the author properly referenced their sources of data and information throughout their poster and if not where in the poster did they fail to do this?

Summary of your Review

Based on your answers above, what is your final recommendation and why have you come to this conclusion?

1. Publish the poster in its current state (the poster is excellent). It should be noted that this recommendation is very rarely given.
2. Publish the poster with minor revisions (the poster is very good).
3. Publish the poster after major revisions are made to it (the poster is good). The poster is in good shape but the author needs to complete a substantial amount of work before it is ready for publication. This work could include major changes required to fix figures and tables, or major changes required to fix large portions of the text.

The poster dimensions should be between 36 inches (height) x 48-56 inches (width). Most people prefer 36-inches height x 48-inches width. Posters can be printed on campus at the locations listed below. I recommend UniPrint in the Ohio Union because you will receive a discounted rate of around $36.00 to print your poster. To receive this discount, tell UniPrint that you are printing your poster for Dr. Lower’s ENR2100 class.

- UniPrint in the Ohio Union ($36 discounted rate): [https://denman.uniprintonline.osu.edu/uStore/14/Home](https://denman.uniprintonline.osu.edu/uStore/14/Home)
- Ohio Union Resource Room: [https://activities.osu.edu/involvement/student_organizations/resource_room](https://activities.osu.edu/involvement/student_organizations/resource_room)
- Thompson Library: OIT Computer Lab, Room 160 (247-4577)
- Health Sciences Library: [http://hsl.osu.edu/service-areas/medvis/services/poster-printing](http://hsl.osu.edu/service-areas/medvis/services/poster-printing)

References for your Poster:

You need a minimum of 10 references for your poster. At least 6 references need to be from a primary source, which means a paper printed in a scientific journal (for example, Nature, Science, Proceedings of the National Academy of Sciences USA, Environmental Science & Technology) or federally-funded research reports (for example, NASA, NOAA, NSF, USGS report). The other 4 references can be from well-respected secondary sources (for example, Columbus Dispatch, Los Angeles Times, National Geographic, New York Times, NPR, PBS, Scientific American, Washington Post). Do NOT cite blogs or webpages! 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.
Newspaper Article in print:


Podcast:


Video / Movie: In most instances, a movie does NOT count as one of the 10 accepted references. A well sourced documentary may be acceptable.


Web Page: In most instances, a web page does NOT count as one of the 10 accepted references.


Web Page organization / group of authors: In most instances, a web page does NOT count as one of the 10 accepted references.


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