**Assignment: Scientific Poster**

**A. Overview and Purpose**

Posters are concise visual communication tools used for sharing information, fostering discussion, gaining feedback, and networking at professional conferences and community events. Your poster should provide a visually-appealing summary of your project goals, methods and accomplishments. It will be displayed in Columbia Hall once campus reopens. Often other opportunities arise for ELP students to show their posters at conferences and other events. If you want experience presenting your poster, you can participate in the [Undergraduate Research Symposium](https://undergradsymposium.uoregon.edu/) with a poster rather than a presentation (optional).

This assignment will help you practice skills and develop knowledge valuable to your success in this course and in your professional career.

***Skills*** *(These are aligned with the* [*National Association of Colleges and Employers’ Career Readiness Competencies*](https://www.naceweb.org/career-readiness/competencies/career-readiness-defined/)*):*

* 1. *Oral/Written Communications*: You will identify audience(s) and create content relevant to and appropriate for your audience(s); apply design concepts to create an attractive, effective poster; distill complex concepts into concise, easy-to-understand summaries; and present your poster during your Final Presentation event.
  2. *Digital Technology*: You will design your poster using common software. You will also develop and utilize graphs, diagrams, images and other illustrations to convey information.
  3. *Teamwork/Collaboration*: You will collaborate as a team to discuss goals, audience and content; assign tasks; and peer-edit to create a professional document with a single “voice.”

***Knowledge:***

1. Learn and apply “best practices” for creating a scientific poster.
2. Synthesize the ecological and natural resource management understanding you have gained through your field work.

**B. Deadlines**

* + - 1. Template and outline due 9:00 am, 5/3 (Week 6).
      2. Draft 1 due 9:00 am, 5/10 (Week 7).
      3. Draft 2 due 9:00 am, 5/24 (Week 9).
      4. Final due 9:00 am, 6/7 (Finals week).

Your GE Project Manager will provide you with instructions on how to submit your assignments.

**C. Criteria for Success**

* See Rubric for grading criteria. It is posted on Canvas.

**D. Developing Your Poster, a Step-by-Step Guide**

**q *Task 1:* Learn about effective poster design.** Review the information from our class workshop on posters and my handout, “Top Tips for Creating Effective Academic Posters” (posted on Canvas). Consider checking out the resources listed at the end of this document. Also, critique other posters: You can conduct an internet search on scientific posters related to your project topic and look at student posters from last year’s UO Undergraduate Research Symposium, available on the [URS YouTube channel](https://www.youtube.com/channel/UCWIFRY6RyaXdnHW5kM78JMw)(look for sessions labeled “Poster Presentation”).

**q *Task 2:* Determine your design**. Discuss and come to consensus with your team regarding the following:

1. Purpose and goals: What do you want to accomplish with your poster?
2. Audience(s): Who will be viewing your poster? Consider their knowledge about and level of interest in your topic.
3. Layout: How do you want to organize your materials? Choose an attractive, clear, easy-to-use template (you can search for free templates on the internet).
4. Plan your graphics: What *specific* photos, maps or other images will you need? How will you create or otherwise obtain the graphics? Only use photos and graphics that you create, are given to you by your community partner or are public domain. Give credit and cite your sources.

**q *Task 3:* Develop content and create poster**. **Include the standard elements as described below. You may combine 2 elements if you wish (e.g., Background and Study Area, Study Area and Methods, Methods and Results, Results and Discussion, or Acknowledgements and Additional Information).**

* + **Title, Authors and Institution: Your title should be short, concise, clear and informative. It should tell what your project was about and where it occurred. Do not use your team name as a title. Include all team members as authors. The author order is up to you, but alphabetical works well for ELP.**
  + **Introduction:** Your goal is to interest your reader in your topic and provide critical background information so the viewer can understand your poster. Why is your project important? (e.g., describe the conservation issue, habitat or species, and why the information you are collecting is needed).
  + **Study Area:** ELP projects are site-specific, so show a map of your study site(s).
  + **Methods:** *Briefly* describe your methods. Don’t include all of the protocol details – just the highlights. You methods should clearly link to the results (in other words, explain how you obtained the results). It is often helpful to include photo or diagrams to show methods. Depending on the project, you may wish to state your hypothesis or hypotheses.
  + **Results:** Briefly summarize your most important, interesting findings. Whenever possible, use figures (graphs, tables, illustrations, photos, diagrams) rather than words. Include a stand-alone legend (= caption) for all figures so your reader will get the critical information if all they do is look at the figures. You can use a figure title to convey the main point.
  + **Discussion:** This section is sometimes called “Conclusions.” Discuss why your results are important and interesting. Provide explanations and alternative explanations as appropriate. You may include either “Future Directions” to describe your next steps, new questions, or needed research, or “Management Recommendations” to describe your ideas for future planning, management, monitoring and/or stewardship at your field site.
  + ***Optional:* Literature Cited:** Although this depends on discipline, literature is generally not cited in posters. Therefore, this section is optional and can be in smaller font. If you include it, choose a standard citation formatting convention and apply it consistently.
  + **Acknowledgments:** You can thank individuals or organizations for specific contributions (equipment, field assistance, review, guidance, funding). Don’t forget to acknowledge your community partners and—if applicable—project funders.

1. Determine who is going to take the lead for each section and set deadlines for drafts.
2. Determine your peer review process, so that drafts get input and proofread by other team members.
3. Decide which program you will use to create poster. Although graphics programs (such as Adobe Illustrator or InDesign) can be better suited for creating posters, I recommend using PowerPoint or GoogleSlides because they are familiar, commonplace, relatively easy to use, and have acceptable graphic capabilities. I suggest Excel for creating graphs and Canva for creating illustrations.
4. Sketch your poster layout and write/edit the majority of your text in word processing software before uploading information to your poster template.
5. Create your poster.

**q *Task 4:* Review poster**

1. Once you’ve created the poster, evaluate and edit through your peer-editing process. It is also helpful to review the poster as a team through Zoom screen share.
2. Make necessary edits.
3. Proofread and then proofread again!
4. Provide your final poster in both pptx and pdf form to your GE Project Manager at the end of the term.

**q *Task 5:* Prepare for presenting your poster**

At conferences, there is always a scheduled time where people stand next to their posters to explain their research. You will be given instructions on how to present your poster during your Final Presentation event.

1. Rehearse both 30-second and 2-3 minute summaries of your project, with an emphasis on the reason for the work and why it is important. Deliver your summary with enthusiasm and interest! You want people to be interested in and remember your work.
2. Develop brief answers to anticipated questions.
3. Practice with other members of your team or other ELP teams.

***E. Notes and Additional Resources***

Conferences organized by professional societies often have contests for “best student poster” and the UO URS has awards as well. Posters are judged on content quality, appearance, ease of understanding, and overall effectiveness.

**Additional Resources**

* [How to Make a Scientific Poster](https://www.calliechappell.com/blog/scientific-poster) by Callie R. Chappell. This is my new favorite resource due to how the author describes the storytelling arc as well as helpful software advice.
* [Designing Conference Posters](http://colinpurrington.com/tips/academic/posterdesign) by Colin Purrington. A classic resource with lots of “dos and don’ts” advice.