PSYC 11 Poster presentation

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🧑‍🏫 Overview

Poster presentations are a cornerstone of scientific meetings. A typical poster is created by printing out a static "slide" on a large piece of posterboard and mounting it on a display stand. The "presenter" then stands to the side of the poster, describing its contents to people who wander by. At scientific meetings, the audience of poster presentations are typically the meeting's attendees (i.e., other scientists interested in the meeting's topic or theme). For this course, your group will present your final project in a "public" poster session.

🧑‍🏫 Learning objectives

This assignment is intended to help you practice:

- Distilling your project down to its essential elements
- Summarizing complex information efficiently, concisely, and clearly
- Gauging audience interest and practicing your "pitching" skills
- Graphic design
- Scientific communication with a broad audience

🧑‍🏫 Creating a poster

There is no one "correct" way to make a poster, although posters (for PSYC 11) tend to share some core characteristics:

- Posters generally contain the following sections: Information bar, Motivation, Approach, Results, and Discussion
- Posters need to fit on the mounting panels provided to students during the poster session (maximum size: 36" × 50")
- Your poster should be visually pleasing, free from typos, and organized in a logical way
- Your poster should serve as an effective visual aid to help you tell your project's "story"

Some general tips and tricks for creating posters, along with additional descriptions of each of the suggested sections above, may be found in these slides. You should treat these suggestions as *guidelines* rather than hard and fast *rules*. The suggestions I've made follow from my own

experiences presenting posters and from tips and tricks that were shared with me over the years. However, ultimately you should design your poster in whatever way you think it will be most effective at helping you to communicate with your audience about your project.

📊 Suggested software tools

Most scientists use one or more of the following tools to create posters:

1. **Slide presentation software**. If you think about a poster as a sort of printed "slide", it makes sense that slide presentation software would be well-suited to creating posters. As a Dartmouth student, Microsoft Powerpoint, Keynote, OpenOffice, Google Slides, and other professional slide presentation software is available to you at no cost. If you choose to create a poster using one of these programs, you may find it useful to watch this tutorial on creating scientific posters in PowerPoint.

2. **Vector-based illustration tools**. Because posters are typically printed on large format paper, it's important to create posters in a way that scales well to large format media. Vector-based illustrations are "infinitely scaleable" in that they appear equally well-defined no matter how much you zoom in. As a Dartmouth student, Adobe Illustrator, Adobe InDesign, Inkscape, and Figma are all available to you at no cost. My personal go-to tool for creating posters is Adobe Illustrator. If you're interested in learning more about Illustrator, Adobe has created a series of high-quality tutorials for getting started with Adobe Illustrator, and this tutorial goes through the process of creating a scientific poster in Illustrator.

3. **Typesetting (coding) languages**. Professional publishers need to repeatedly lay out huge amounts of text and graphics. Typesetting languages such as LaTeX, Markdown, and HTML are designed to separate the *content* of a document from its *appearance*. The purpose of these tools is to enable content creators to specify what material should be displayed (without worrying about the specifics of how it will appear). While these tools generally provide sensible default layout choices that work well in most cases, it is also possible for designers to customize how material is displayed (without worrying about the specific content). The two easiest-to-learn typesetting tools are beamer (which is a class designed for creating slides and posters in LaTeX) and R Markdown. If you want to try out beamer, Overleaf provides a browser-based editor and many poster templates that may be easily customized with your project's content. The easiest way to create a poster in R Markdown is to use the posterdown package. Another (less popular) option, if you are the adventurous sort, is the ReLaXed framework. ReLaXed enables you to define the content of your poster using a "Markdown-like" language, and it can create some very visually pleasing results. While LaTeX, R Markdown, and ReLaXed all have steeper learning curves than the non-coding approaches, they also require far less work to actually create the poster than the other typical options (since layout and formatting are done for you automatically).

Whichever tool(s) you use to create your poster, you should save your final document as a PDF to facilitate printing. Your poster's PDF will also become part of your group's poster submission.

📊 Printing your poster

After creating a PDF of your poster (and checking it over super carefully!) you're ready to bring it into the real world! You should schedule a time to print your poster at the Evans Map Room in Baker library. Printing costs may be charged to our class's chart string. One person from each group should reach out to me (or the TAs) on Slack to get access to the relevant account information. You should schedule your printing appointment several business days before the last day of class in order to ensure that you will have enough time to create the poster before you present it.

If you don't plan sufficiently well, you may need to have your poster printed at a local professional printing facility (e.g., FedEx Kinkos, Staples, etc.). If you choose an off-campus option for printing your poster, you'll need to pay any associated costs yourself. Generally printing a full-sized poster costs around $100 (plus rush charges depending on how quickly you need it ready).

🧑‍🏫 Presenting your poster

You will present your poster in two ways: (a) as a recorded presentation that you'll submit for a grade and share with other PSYC 11 students and (b) as a public presentation for people outside of PSYC 11.

📊 Creating your script

Although poster sessions are typically interactive, you should prepare a 3–5 minute "script" for explaining your project to people who visit your poster. Your script can take any form you choose, and involve any group member(s) you choose, but in general you should aim to include the following information:

- Explain what your main question is and show why it's interesting
- Show how you studied the question
- Show what you found
- Explain what you think it means

Your script is likely to be most effective if you can refer to specific components of your poster as you are taking your audience through your project.

📊 Recorded presentation

You should create a 3–5 minute recording of your group's presentation to be included in your official submission of your project. This can take several forms:

- An auditory recording
- A video recording of a presentation (e.g., while standing in front of the poster or screen sharing)
- A pre-recorded PowerPoint or Keynote presentation that can be (easily) auto-played

Your recording will be due by **11:59PM on Wednesday, June 1, 2022**.

📊 Public presentation

Your group will present your poster to the faculty, students, and staff of the Department of Psychological and Brain Sciences during our last class meeting (on **Wednesday, June 1, 2022**). The attendees may also include members of the broader Dartmouth community. The poster session will take place in Moore Hall, in the hallway outside of our usual classroom (B03).

During the poster session, each group will mount their poster on an an easel provided by the department. Group members will stand in front of their poster. As poster session attendees walk by, they'll ask to hear about your project. You can use the script you've prepared to help guide your presentations, but you should also be prepared to go off-script. Poster presentations are often dynamic and highly interactive. It is normal for presentations to be interrupted frequently, be cut short (or go long if there are lots of questions), restart several times as new people filter by, and so on.

🏆 Best poster competition

Non-student attendees of the public poster session will have the opportunity to "vote" on their favorite poster using this form. The group with the top-rated poster will receive a small (material) prize, along with eternal glory associated with membership in the elite club of past and future "Best PSYC 11 Poster" winners. Past membership in this exclusive group may have included 17 Nobel Laureates, 3 US Presidents, 10 Olympic Medalists, and myriad other world leaders.

👩‍🏫 Submitting your poster presentation

One member from each group should upload the following materials on Canvas:

- A document listing all group members' names
- A PDF of your group's poster
- A recording of your group's presentation

👩‍🏫 Concluding remarks

Effective poster presentations must both attract interest (so that there is someone to present to) and clearly communicate (so that the audience takes something away from the experience). Consider what you've learned in the lab exercises:

- Which approaches to motivating an audience have tended to be most engaging or interesting (e.g., in the Pitch Session Lab)?
- What strategies have worked well for clearly communicating your approach (e.g., in the Picture Lab) and/or results (e.g., in the Data Sleuthing Lab)?
- How can you situate your findings within the context of the broader literature (e.g., as in the Literature Review Lab)?

As you've likely internalized by this point in the course, there is no "right" way to present a poster or (more generally) to tell someone about your scientific projects. What has worked for other

projects *may* work well for you, but you might also think of a never-before-tried approach that works even better!

Finally, it is important to keep in mind that you have worked hard on your project– be confident and proud of what you've done! It's not easy to do science from scratch, especially on a tight schedule. Good science isn't about doing everything *perfectly* (that's impossible in finite time and with finite resources). It's about *balancing* your approach against the time and resources you have. Science is an ongoing endeavor, to be shared by all of humanity. Most scientists never fully answer a question or "finish" a line of research. Rather, our goal as scientists is to *contribute* to the collective pool of knowledge. If we contribute high-quality work to that knowledge pool, and if we've done our best to communicate our findings effectively to other people, then we've done our jobs as scientists.