



2024 Hauber Paper and Poster Instructions

According to the Hauber Fellowship Program contract signed by all Hauber Fellows, each participating student will need to prepare:

- A. A research summary report about their work (using the scientific research paper format).
- B. A research poster to display the research work done with the opportunity to present at events during the academic year, including Grand Seminar reception during the fall 2024, and Loyola's Undergraduate Student Research and Scholarship Colloquium in the spring or 2025.

A. Research Summary Paper

Paper due date: September 2024

- Please submit electronic copies to your faculty mentor and copy Julieta Guerra jguerra@loyola.edu & Bahram Roughani broughani@loyola.edu

The Main Elements of the Scientific Research Paper: In the research summary (i.e., scientific paper) you will describe your research work by explaining; what you did, why you did it, what the results were, and what the main conclusions are.

The main elements to be included in a scientific paper are:

- **Title**
- **Abstract**
- **Introduction/Background:** Describing what the research is about including the key concepts, work of other researchers, and lessons learned from previous work, etc. *Introduction answers "why?"*
- **Methods:** The experiments you ran, the simulation you developed or employed and other related items. *Methods answers "when, where, how, how much?"*
- **Results:** Results should be presented concisely using scientific norms such as graphs and tables. *Results answers "what?"*
- **Discussion:** How you have interpreted the results using scientific theories to explain your observations in the context of your project. *Discussion answers "so what?"*
- **Acknowledgments:** Describes what people or institutions (in addition to the authors) contributed to the work including sources of financial support, grants, mentors, contributors, etc.
- **Works Cited:** A list of scientific references you have used.
- **Appendices:** Additional information not included in the main report.

There is no set minimum or maximum number of pages for the paper. However, your paper must fully explain your research project. Please touch base with your faculty mentor, or you may contact Dr. Roughani if you have any questions.

B. Research Poster:

Poster due date:

- Power Point is the suggested software for poster design. You can revise the poster template attached or download an appropriate template to show your Hauber results using the following link (Make sure it has the Hauber logo and Loyola University logo as part of the poster): <https://www.posterpresentations.com/free-poster-templates.html>
- Please design your poster to be 48"x 36" (horizontal).
- Please remember to include acknowledgments (i.e., Loyola department, faculty mentor, program/donor support).
- Please submit electronic copies to your faculty mentor and copy Julieta Guerra jguerra@loyola.edu & Bahram Roughani broughani@loyola.edu. The final file should be sent as a pdf.

Suggestions for Creating Effective Posters and Poster Presentations:

Posters should be prepared with poster sessions in mind that are informal in nature. Poster sessions allow you to share your work on a one-to-one basis. A good poster centers on a main theme, presents useful information, and stimulates discussion. To enhance your poster quality, remember the following suggestions:

- **Essentials.** Name, faculty mentor, department, research title, Loyola University Maryland
- **Keep it simple.** Keep your poster simple and uncluttered. Limit to one or two fonts. Avoid using all capitals, which are more difficult to read. Use complementary colors with high contrast to alleviate eye strain. Visual content should contain minimal information; focus on one idea per slide. Remember, the number of information chunks we can recall at a time is " 7 ± 2 ". Assemble your presentation slides in " 7 ± 2 "!
- **Make it visually interesting.** Use graphics, photos, and diagrams with a high degree of relevancy to add depth, meaning and visual interest for your topic.
- **Make it readable.** Make text readable from 5 feet or more away. Use bullets for main points. Details can be included in your conversation, on a handout, or on a website on display during the session. Provide the URL in any other resource materials.
- **Create a compelling title.** Include a title, institution/organization name, your name and the name of your faculty mentor, and brief summary so participants will know if your topic is of interest to them.

Resources:

One may reach out to the following sources for further help with preparing research posters:

Loyola Notre Dame Library Guides: <https://guides.lndlibrary.org/hauber>

Resources at The Writing Center: <https://www.loyola.edu/departments/writing-center>

Links to useful and relevant references for writing scientific paper:

- <https://writing.colostate.edu/guides/guide.cfm?guideid=83>
- <https://libguides.usc.edu/writingguide/abstract>
- <https://www.loyola.edu/departments/writing-center/resources/apa-style>
- <https://facultystaff.richmond.edu/~ggilfoyl/intermediate/writing.pdf>
- http://biology.kenyon.edu/Bio_InfoLit/how/page2.html
- <https://www.ncsu.edu/labwrite/instructors/scientificart-parts.pdf>
- <http://people.chem.ucsb.edu/laverman/leroy/Chem116/PDF116BL/ManuscriptPartsLecture.pdf>
- <http://simplyeducate.me/2012/11/14/how-to-write-a-scientific-paper-8-elements/>

Links to useful and relevant references for preparing scientific posters:

- <https://www.npr.org/sections/health-shots/2019/06/11/729314248/to-save-the-science-poster-researchers-want-to-kill-it-and-start-over>
- <http://www.educause.edu/conferences-events/presenter-concierge/design-presentation>
- <http://guides.nyu.edu/posters>
- <http://colinpurrington.com/tips/poster-design>
- <https://www.utexas.edu/ugs/our/poster>