



PRSEF Senior Division Project Report Instructions

A written submission of work completed is required for all Senior Division projects at PRSEF. The submission may take one of two forms:

1. A written report using the template below or
2. A research paper of up to 20 pages written in the style of a scientific journal article.

PRSEF Senior Division Project Report Template

Instructions: Use the following template to create your final project report for PRSEF. Do not include information which is not specified in the template. If you are submitting a continuation project, include only information related to this year's project unless otherwise directed in the instructions below. This submission is required of all fair participants and will be used in the category judging process. You may use any software tools you want to prepare your report, but the final report must be a single PDF document.

Project ID and Title (DO NOT include your name)

Abstract (max. 250 words)

The abstract summarizes the information contained in the rest of this document. An abstract includes: (a) the research question or engineering problem, (b) procedures used, (c) data, (d) interpretation and (d) conclusions. It also may include any possible research applications. Information not specifically included in these instructions should not be included in the abstract.

What was your research question or engineering problem? (max. 250 words)

Explain what is known or has already been done in your research area. Include a brief review of relevant literature. If this is a continuation project, a brief summary of your prior research is appropriate here. Be sure to distinguish your previous work from this year's project.

What were you trying to find out? What problem were you trying to solve? Include a description of your purpose, your research question, and your hypothesis or engineering goal.

Explain your methodology and procedures for carrying out your project in detail, addressing the questions below. For engineering projects, explain your methods and procedures for building your design. (max. 400 words)

What did you do? What data did you collect and how did you collect that data? Discuss your control group and the variables you tested.

For engineering projects, how did you design and produce your prototype? What were your testing procedures?

DO NOT include a list of materials.



What was the result(s) of your project? (max. 250 words)

Attach data tables and graphs which illustrate your data. Include relevant statistical analysis of the data. Were any of your results statistically significant? How do you know this?

What is your interpretation of these results? (max. 250 words)

What do these results mean? Compare your results with theories, published data, commonly held beliefs, and expected results.

Discuss possible errors. Did any questions or problems arise that you were not expecting? How did the data vary between repeated observations of similar events? How were results affected by uncontrolled events?

What conclusions did you reach? (max. 250 words)

How do the results address your research question or engineering problem? Do your results support your hypothesis?

What do these results mean in the context of the literature review and other work being done in your research area? What applications do you see for your work?

List References

Include any documentation used which was not of your own creation (i.e., books, journal articles). The best way to understand references is to look at a published journal in your field. Look to <https://www.wlnonline.org/PRSEF> or <https://owl.purdue.edu> to learn more about how to format your bibliography. Website addresses / links / urls alone are not acceptable references. A minimum of 5 high quality scientific sources must be included.