Components of a Professional Paper

Title
Concise, informative, inviting

Authors
Listing may be either
1) In order of importance related to the work – the actual author and/or the key experimenter coming first, and rest in descending order of significance.
2) Alphabetical

Abstract
Very important! Needs to stand alone and give an accurate, succinct picture of your research. Your abstract will attract (or detract) potential readers of your paper. Should be a brief summary of your paper – including topic sentence, methods used, and summary of results/conclusions.

Introduction
Should include
1) Background information
2) Motivation/need for project
3) Hypothesis and/or questions you are trying to answer

Materials and Methods/Experimental Design
Needs to address the following questions
1) How did you attempt to answer your questions posed in the Introduction?
2) How did you gather data?
3) What did you do with the data? What analysis procedures were used?
4) What tools, instruments, or programs did you use?

Observations
What trends, patterns, or surprises did you notice or learn?

Results
1) What did the experiment and observations reveal?
2) Was the initial question answered? If so, how?
3) Were there surprises/anomalies in the data or unexpected events/results during the process?

Discussion/Conclusion
Interpret the results! What do they mean? How do they answer the questions?
What new questions were raised? What implications do the results have for the research field?
What are potential future research questions based on this research?

Acknowledgments
Thank your advisors, graduate students, mentors, family members, etc…
Acknowledge support of PWSE and any other funding agencies/grants that supported your research.

References
Several possible styles. Style manuals available in the library.
* Review other papers/publications in your research area
* Can also review previous intern papers in University Library Archives!

Last updated: 4/26/2023