

Term Paper Format

Note: Use third person writing your paper

Title Page should be unnumbered. It should include Student's Name, Course and Section number, topic number (as it appears in the List of Possible Topics), Title and Abstract.

About the title: As with any paper you write, a title is important. It should catch the attention of the reader as well as reflect the content of your paper. It should not be too long and it should not be too general.

Abstract Briefly summarize your paper proposal explaining the basic purpose of your paper, state the focusing question(s). Abstract is not the same as an introduction! An abstract should be short and as independent from the paper as possible.

Abstract is not the same as a paper proposal! Avoid empty phrases like "In this paper we consider, among other results, that ...". Just write "We consider .."

Write your abstract after writing the body of your paper.

Table of Contents Make sure to update it (if you make changes in your document) if you type it manually. Note that there is an option in Word and LaTeX to create it automatically.

Introduction State the problem here and explain it to the reader. Assume that the reader is unfamiliar with the problem. The introduction should

- briefly describe the history of the problem.
- indicate the reader why the problem is interesting;
- give some indication what will follow in the paper (state the question or questions that you will examine in your paper);
- include schemes of logical dependence of sections;
- **(optional:)** mention related and open problems.

Body (the main part consisting of a few sections.) The body should be

- a mix of English narrative and more abstract representations (define everything that you are talking about, discuss discoveries and applications);
- divided into sections and subsections to make the exposition clearer.

It also should include

- simple examples to illustrate of all important ideas and to help your reader understand your reasoning (pictures and diagrams could be useful).
- worked out details of the main topic or result.

Remember that the paper need not contain full proofs, but *should have a significant mathematical content* (e.g. an outline of the proof, its steps, and techniques used, examples and counter-examples for definitions).

In addition, make sure

- to simplify your ideas and put them in a straightforward way. As a question is raised in the reader's mind, the paper is ready to answer it.
- that each of your results depends on the main theorem and/or that all the theories used are related to each other and defined in a proper step by step order.

Conclusion The conclusion will be the last paragraph of your paper. It should not sound too much as an introduction. Sum up your key points here. It should give your reader a sense of satisfaction and completion. You may also suggest further reading and explain why your topic is important for readers.

References *You should cite sources through your paper* and list the references after. You must use and cite two or more sources. It is appropriate to use Wikipedia and/or other material that you found on the World Wide Web as a good starting point for learning about your topic. But a college-level paper needs to consult directly printed materials (e.g. a book, journal, or newspaper article). For example, you can consult directly the articles, books, or other sources mentioned by Wikipedia and use those as the reference.

For references format see, for example, page 317 in your textbook.

Appendix A: Figures and Tables All graphs, tables, diagrams and other pictures should be neatly drawn with relevant labels. Do not embed them in the text. They should be collected in an appendix at the end of the paper, labeled (for references in the text) and titled.

Cite all pictures, tables, diagrams that not created by you. It is considered plagiarism if you don't.

Appendix B (optional) You can have more appendices if needed. Materials in an appendix should be referenced at some point in the body of the paper.

References

- [1] K.P. Lee, A Guide to Writing Mathematics, <http://www.cs.ucdavis.edu/~amenta/w10/writingman.pdf>
- [2] M. Tomforde, Mathematical Writing: A Brief Guide, <http://www.math.uh.edu/~tomforde/MathWriting.pdf>