

MATH300 Term Paper Format and Organization

FORMAT

Paper: Standard size (8.5" x 11")

Page Margins: 1" on all sides (top, bottom, left, right)

Font: 12-pt. easily readable (e.g., Times Roman). Note all variables should be italicized.

Spacing: Double-spaced throughout, including captions and bibliography.

ORGANIZATION

Title Page: Should be unnumbered and include student's name, course and section number, topic, title and abstract.

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.

Abstract: should be short (from 50 words to 250 words) and directed to a more general audience than the rest of the paper. Briefly summarize your paper explaining its basic purpose. An 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 .." (In the rest of the text use third person writing your paper.) 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. Leave this page unnumbered.

Introduction: should prepare the reader to understand the rest of the paper. State the topic/problem here and explain it to the reader. Assume that the reader is unfamiliar with the topic/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 questions/ideas that you will examine in your paper).
- briefly describe what to expect in each section of the paper (this can help the reader better understand your paper)
- (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)
- be divided into sections (and possibly subsections) to make the exposition clearer.

- include simple examples to illustrate any important ideas and to help your reader understand your reasoning (pictures and diagrams could be useful).
- include 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 counterexamples 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 order.

Conclusion: The conclusion will be the last paragraph of your paper. It should not sound too much like 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: The paper should be fully referenced and any reasonable style of referencing is acceptable. You must use and cite at least two 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. However, you should not use Wikipedia as a reference (note that each Wiki page has references at the bottom you can look into.) A college-level paper needs to consult directly printed materials (e.g. a book, journal, or newspaper article) that are linked through the library website or a faculty member's website. Try using Google Scholar to find articles.

Figures and Tables: All graphs, tables, diagrams and other pictures should be neatly drawn with relevant labels. Cite all pictures, tables, diagrams that are not created by you. Figures and tables may be inserted throughout the body of the paper, but occasionally, it may be useful to include them in the Appendix instead.

Appendix (optional): Materials in an appendix should be referenced at some point in the body of the paper. This can include detailed information or any tables, graphs, or images that are too bulky or too distracting for the body of your paper.