

How to Write a Term Paper (Guidelines)
College of Engineering & Mines energy studies (CEMES)
University of North Dakota
Academic session 2023

This document outlines the fundamentals of writing and the document formatting that are required in term project in **College of Engineering & Mines Energy Studies**. Writing a technical/review report, whether for publication or coursework, can be challenging. The major source of difficulty is generally deciding what information to include, and tracking down that information. However, the mechanics of writing – format, style, grammar, etc. – are also important. All papers should be perfectly formatted, should contain no style or grammar errors, should look good, and should represent the best that the author can do. Fundamental mechanical errors are 100% unacceptable.

To help provide structure and ensure continued progress on the writing report, below are some specifications and suggestions to guide your writing.

Basic Format

- Use 12 point New Times Roman font
- 1.5 line spacing
- 1" margins on all sides
- Major Heading should be 14 point bold
- Secondary heading should be 12 point bold
- Tertiary heading should be 12 point bold italic (try to avoid having tertiary heading if possible)
- Separate paragraphs with an extra (blank) line
- Paragraph/section headings should be preceded by two blank lines
- Page numbers should be in the right-hand corner of all pages
- Title, author, and affiliation should be at the top of the first page of the paper

Headings and Organization

Section and paragraph headings serve several very important purposes. First, they help the reader navigate a paper to find the information they want. Second, they help the reader get

ready for what is to follow. Third, they help the author organize thoughts and information in a logical way.

Sometimes it is appropriate to have several different levels of headings: major headings, secondary headings, tertiary headings, etc. So, main sections of the paper have titles and each main section has parts with subtitles, etc. In general, the more different kinds of headings, the more complicated it is for the reader to follow – so, unless there is some compelling reason, keep the number of different kinds of headings to one or two.

When writing a paper – before the final draft -- it is often useful to include headings/titles for just about every paragraph. Then, you can remove all the paragraph text – just keep the headings themselves – to see if the headings are organized in a logical way. This will allow you to see quickly if the organization is good, if there are redundancies, or if some things are missing. At the end, when you get to the final version of the paper, you can go back and remove headings that are no longer needed.

Sections of a Paper

	What to include
Abstract (<250 words)	<ol style="list-style-type: none"> 1. Purpose/Thesis of the review 2. Approach/Methodology-how did you approach your review/topic? 3. Main findings of the review 4. Conclusion
Introduction/ Background	<ol style="list-style-type: none"> 1. Issue? Why should anyone be concerned with this issue? 2. Has the issue in (1) been addressed by someone else? Who? When? How?(summary) 3. What is the current state-of-art? Where do we stand NOW on this issue? (summary) 4. Overall scope/objective of the review 5. Specific objectives aimed at in the review
Significance	<ol style="list-style-type: none"> 1. Detailed explanation of INTRO item (1) and 2. 2. Why should scientists, in particular study this issue? 3. Why should taxpayers' money go into funding these studies?

Methodology/Approach	<ol style="list-style-type: none"> 1. Detailed explanation of ABST item (2) - Your approach in addressing the mentioned issue 2. Detailed explanation of INTRO item (2) and (3)-Others approaches
Findings	<ol style="list-style-type: none"> 1. Your findings? Were your objectives achieved? 2. Other findings? What else did others find? (i.e., others who had happened to review same topic)
Conclusion	<ol style="list-style-type: none"> 1. What is/are main take away(s)from the review? 2. What else can be done for an overall improvement?
Presentation	Presentation of the term project at the end of the Semester

Key Considerations

Notes to the Reader and References to the Author Introductions – and other parts of your paper – should NOT contain chatty comments, personal notes or fatuous commentary. If a paper is properly organized, with good headings, there is no reason to tell the reader what you are about to say, or will say later on. Do not, for instance, ever have a sentence that begins “In this paper, I will explain . . .” Do not say things like “You may wonder what this means?” Do not say “I investigated Finnish beer and found it to be skunky.” Just say what you have to say without the conversational distractions. Explain the purpose without referring to yourself or to the reader.

Grammar, Syntax, Spelling, etc.

Today, we have spell checkers. We also have grammar checkers. We also have the UND Writing Center and instructors who are willing to help you with your writing. Consequently, your papers should include zero grammar, syntax, or spelling errors. Yes, an occasional homonym will slip in, and there may be other oddball mistakes – but the rule is that zero mechanical errors are allowed. One key tool – you should always use it – is Grammatik. Grammatik is a fantastic grammar and style checker. Unfortunately, it is only available with WordPerfect. The good news is that WordPerfect can open and read Word files (and also some other formats). So, we have installed WordPerfect on the computers in the lounge in the Leonard Hall basement. You should get in the habit of using Grammatik for everything you write. Be sure to set Grammatik to be “super strict” before you use it. It may flag some things that you don’t want to change – you can ignore those – but it won’t miss anything.

Abbreviations and Symbols

Only use abbreviations if they are standard – unless you define them the first time you use them. Most major publications have a list of allowable abbreviation in their instructions for authors. Also, don't be lazy. Your computer and word processor can put symbols in your paper. Don't cheat and say "degree" because you don't know where the symbol is – find the symbol. Similarly, subscripts and superscripts must be subscripts and superscripts.

Figures and Tables

The reference to a figure or table has to precede the figure/table itself. Also, every figure and table has to be referenced in the text. All figures must have captions and they must be numbered. The first figure is Figure 1 and they are numbered sequentially. Similarly, all tables must have titles, and the first table is Table 1, etc. Any figures in your papers must be sharp and NOT pixelated.. If you swipe them from the internet or some other source, you MUST tell where they came from in the figure caption.

References in the Text: APA 7th edition. In the References Cited section, all references should be in alphabetical order by author.