

To: CE428 Students
From: Dr. T. Kofke
Date: February 14, 2005
Subject: Memo Format for CE 428 Laboratory Reports

Summary Your ability to communicate in memo format is crucial to your future success. During your careers, most of your communications will be in the form of memos. Therefore, I am requesting that your communications for CE 428 are in memo form. This memo describes the format of a memo, and it will refer you to other references on memo writing.

Discussion A memo is a basic document that is used to communicate results within a company. The purpose of a memo is to inform the reader of specific information. Memos may also be used to persuade others to take action, give feedback, or react to a situation.

Memos that describe technical results are typically 1-5 pages. Memos that summarize action plans from a meeting are only 1-2 pages. If a memo is more than 1-2 pages long, it should have a summary section, as shown above. Even if you do not have a distinct summary section, your memo should start with a clearly stated purpose.

Keep in mind that memos, especially those submitted by e-mail, are circulated beyond your distribution list. Also, in industry, projects follow business cycles, so either you, or someone else will be referring to your memo when the project is revisited in the future. For this reason, a memo needs to be thorough.

The typical components of a memo are:

- Header,
- Purpose,
- Summary,
- Discussion,
- Action or Conclusions (or Future Work), and
- Attachments

Header: The header contains information at the top of the memo. It tells who the memo is to, whom it is from, the date that it was sent, and a detailed subject. When the subject is vague, it may not peak the recipient's interest, or the recipient may not know why he or she was included in the distribution list. The web site www.ecf.utoronto.ca/~writing/handbook-memo.html has an excellent description of memo headings.

Purpose: State your reason for writing the memo immediately. A busy person will scan the purpose and determine the importance of your memo. If the purpose is not instantly clear, your recipient may not read your memo.

Summary: A short memo might not have a summary section. It will have the purpose as a stand-alone statement, and proceed on to the discussion. A longer memo will have a summary statement. It is similar to an abstract, it should state the purpose, (you won't use a separate purpose section), importance, and summarize the main points of the subject of the memo. As you saw above, I did not use a purpose section, but I think the summary section got straight to the purpose. Refer to the Toronto website listed above, there is a great example.

Whenever possible, put the financial impact of the work in the summary. It is the real purpose behind most work that is done.

Note: This section might be the only section some recipients will read, make sure it is well written!

Discussion: This section encompasses the background, the procedures, and the results. The background portion should also give financial and business reasons for the work when possible. Briefly describe any experiments you performed or calculations that you made. You should provide supporting data to give the reader confidence in your recommendations.

The information in the discussion section should be given structure with headings and bulleted lists and arranged in an order that makes sense to your reader. It is often best to begin with information that is most important such as key findings or recommendations and then move to specific or supporting facts.

Conclusion (or Action or Future Plans): This is the wrap-up of the memo. If your work is part of an ongoing project, you may choose to call this section Action or Future Plans. If you are done with the project, you will call this section Conclusion(s).

Attachments: The attachments that you add should be listed, and they should include

- Sample Calculations
- List of Equations Used (if you want)
- Lab Notebook Pages
- Tables of Raw Data, Results of Intermediate Calculations
- Other Supporting Material (INCLUDE SIGNED LAB REPORT HONESTY STATEMENT!)

The sample calculations are important to your memo. If you do not include thorough sample calculations (that include unit checks) your memo will be returned without grading.

Appendix 1. Grading of Memos/Laboratory Assignments.

Here is the breakdown of the grading of your work.

Memo: 100 points

Heading: 5 points

Summary: 15 points

Discussion: 55 points

Background and Purpose – 10 points

Procedures – 10 points

Results – 35 points

Conclusions: 5 points

Appendices: 20 points if item in italics is completed

- Figures and/or Tables (if not included in text of memo)
- Copy of Notebook pages. Notebook pages must follow proper laboratory procedure.
- Tabulated data.
- Give sample calculations. *I will not grade reports without handwritten sample calculations that include unit checks.*
- Describe any iterative calculations if necessary.
- Any other material needed for clarification.

Expectations:

I expect your memos to:

- **be professional in tone**
- **be 2-3 pages, not including attachments**
- **reply to requests made in assignment memo**
- **Contain complete sentences**
- **Contain sentences and paragraphs that make sense**
- **Have clearly labeled figures and tables whose captions describe the system studied**
- **include SAMPLE CALCULATIONS!- clear and easy to follow- I suggest that the sample calculations be in narrative form. (Imagine that you are explaining your work to someone)**

Appendix 2 Sources for Information about Memo writing

Besides the Toronto site mentioned above, there are numerous websites dedicated to the art of writing memos. Some of the most useful are listed below:

http://owl.english.purdue.edu/handouts/print/pw/p_memo.html

<http://www.writing.eng.vt.edu/> The sample memo is longer than I expect but note how the discussion section is broken into subsections that lead the reader through the information.

<http://tardis.union.edu/~andersoa/MELabReports.htm>