

MECH 577 Optimum Design

Guidelines on Report-Organization–Winter, 2013

Format

The Project Report must be typed using a conventional font, of 11 to 12 points¹. Standard 8.5" × 11" paper must be used. Line spacing must be single, as in this document. Margins should be such as to ensure that all text is clearly legible and does not risk being truncated by an off-centre photocopier. **Double-sided copies are required.** If your printer doesn't have the feature to produce double-sided printouts, print first all odd-numbered, then all even-numbered pages. A good reference on style, posted on myCourses, is a document by Bordan (1994).

Content

The report is to be divided into sections, subsections and subsubsections, as needed. The structure of the report is outlined below, in the order of appearance in the report:

- **Title Page:** this must bear: a) the report title, same as that given in the project proposal; b) the author's name, but no ID number here; c) the course number and title; and d) the date.
- **Abstract:** A 100-word summary of the report, highlighting what was done, how this was done, and outlining the results. This item will go in p. 1, not counting the title page. In this page the student's ID number must be included.
- On the same p. 1, continue with the body of the report: one to three main sections describing the work you did and the results obtained, with a proper discussion of the relevance of these results. **Analysis of the problem at hand is essential.**
- Equations need not be numbered, but all those cross-referenced must be numbered. When a set of equations is strongly interrelated, then all set equations must carry the same number, distinguishing among themselves by an alphabetic suffix, in the order *a*, *b*, *c*, etc. Matrix and vector names must be typeset with boldface type, reserving upper-cases for matrices. All scalar variables must be typed in italics.
- All figures and tables must carry a number and a caption. When cited, refer to the figure or table by its number, preceded by "Fig." or "Table," as the case may be. Do not use abbreviations at the beginning of a phrase.
- A brief section of **Conclusions**, discussing the results obtained. Was it possible to meet all project requirements? If so, to what extent were all requirements met? If not, why?

¹If you are not familiar with "point" as a unit to measure font size, this document is typeset in 12-pt fonts.

- A concise List of References. **All references listed must be cited, and all cited references must be listed** after the Conclusions section. Reference citation is quite important: mimic as faithfully as possible the reference citation format in the Lecture Notes.
- Websites are, by their nature, *ephemeral*, as opposed to *archival*. Do not include website URLs in the list of references. Relegate them to footnotes.

Notes on Report Presentation

Important issues to observe in the presentation are listed below:

- **Include** a printout of the project statement as an Appendix. The instructor doesn't need it to mark your project, but you will need it for further reference.
- **Do not include** text or developments taken from the Lecture Notes, for this a) will take precious space and b) will be penalized in the *Presentation* part of the mark. If material from the Lecture Notes is needed, just mention the source in the form (Angeles, 2009) and list it in the *References* section.
- **Pay special attention to the Reference Citation Format. Use only** the “author(s)'s name(s), year” format, as appearing in (Angeles, 2010), with **all cited references listed** in the *References* section at the end of the report and before the Appendix(ces). List of references must follow an alphabetical order by name of first author, **without numbering!**
- Pages must be numbered.
- Neither bind nor put your report in hard covers. Use a stapler that can handle the number of report sheets. Make sure that staples are properly closed, to avoid hurting one's fingers when manipulating the document.

Mark Distribution

The report mark is distributed as: Technical Content, 2/3; Presentation, 1/3.

References

Angeles, J., 2013, *Lecture Notes of MECH 577 Optimum Design*, Department of Mechanical Engineering, McGill University, Montreal.

Bordan, J., 1994, *Effective Presentations*, Centre for Intelligent Machines, McGill University, Montreal².

²Available on the course website.