Faculty of Engineering and Built Environment

ENGG3500 Managing Engineering Projects.

Formatting, Style and Referencing Specifications for ENGG3500 Assessment Items (2018)

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1. Introduction

In this course, and in your working life, you can find many books and documents that will help you use the written word to communicate your thoughts; one such book is "*A Guide to Writing as an Engineer*". This book specifies what components are usually required for formal reports; such a Cover Letter (often called a transmittal letter), an Introduction, Background and Literature Review, etc. That said, in this specification document, the focus is on the presentation of what you actually produce; in other words, what should your assessment items look like? In short, they should look exactly like this document.

You may think, at first, that spending time making sure your document is presented in a particular (and perhaps arbitrary) manner is an unnecessary burden. However, you should have no doubt that the "look and feel" of your written communication **will always** be used (rightly or wrongly) by your future employers, clients and peers as a measure of your engineering professionalism. Indeed, many companies have very strict specifications about how documents are to appear if they are to be sent out under the company's letterhead; and rightly so, as the reputation of an organisation can be damaged if it releases documents that don't look like they're from that organisation, or worse, if documents look as if they've been "thrown together" at the last minute, even though the information within may be first-class.

This document provides very simple guidance on just three aspects of how your assessment items are to "look and feel"; in that, you are to use specified forms of document-formatting, text-styles and referencing. Of course, there is significantly more detail that you will need to consider when publishing your final document; however, focussing on these three aspects is a start, and your grade for your assessment items will (in part) depend on how well you adhere to these specifications.

2. Document Formatting

2.1 Page Layout

Each page of is to be A4 size, have a portrait orientation and have 2.54 cm margins on each side, top and bottom.

2.2 Tables

If you include any data in your document, then it is to be placed into a Table, and, if you use a table then you **must** refer to it from somewhere within your text, and before the Table is shown. Each table is to be sequentially numbered with its caption in italics; an example is shown below at Table 1. The Table itself must be centred on the page. The table number and caption is located above the table and aligned to the left side of the page. All information within a table is to be centred, with major headings in bold.

The rules for any table's lines are:

- All lines are to be solid black.
- Major horizontal lines are at the top and bottom of the first row and the entire table. Similar data sets are to be separated by minor horizontal lines, with no horizontal lines within similar data sets and there are to be no vertical lines at all.
- Major lines are of 2.25 point thickness with minor lines of 1 point thickness.

Table 1. An example table containing random inspection data.

	Structural elements inspected, by date.			
Date:	Columns:	Beams:	Bolts:	Footings:
30 January 2010	No	No	No	No
31 January 2010	Yes	Yes	Yes	Yes
01 February 2010	Yes	Yes	Yes	Yes
02 February 2010	No	No	Yes	Yes
03 February 2010	Yes	Yes	Yes	Yes

2.3 Figures

Any image, drawing, photograph, etc, is considered a figure, and, if you place any figure into your document then you **must** appropriately refer to it from somewhere (and nearby) within your text. If you don't (or can't) write something in your text about a figure, then you should remove that figure, as you should not assume that the reader will automatically understand the figure's relevance.

Each figure is to be sequentially numbered with the caption in italics; an example is shown below at Figure 1. A figure's number and caption is located underneath and is centred on the page. The caption should be a sentence, meaning that it begins with a capital, and ends with a full-stop.

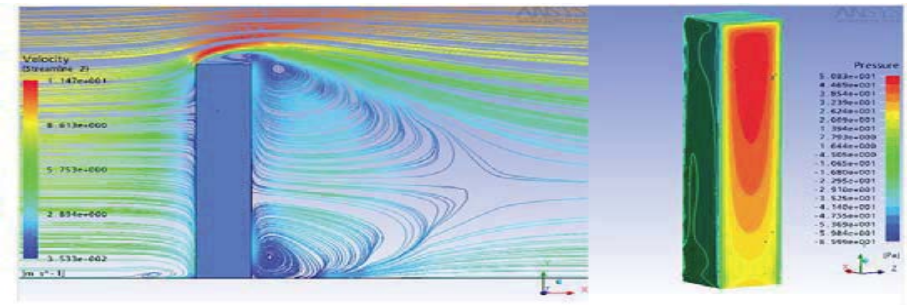


Figure 1. Wind load pressures on a high-rise structure at Honeysuckle Drive, Newcastle.

2.4 Equations

Any equation (if used) must be referred to from within the text, and before the equation occurs. Equations are centred, 1.5 line spacing, sequentially numbered (with the number in brackets at the right hand margin), and every element sequentially explained, as per Eqn 1:

$$E = M \times c^2 \tag{1}$$

where: E = Energy

M = Mass

c = the speed of light

3. Text Styles

Text styles within a document are essentially a collection of formatting commands (font commands, paragraph controls, etc) for each of the common types of components that are likely to make up your document.

Just about every word processor will allow you to pre-set styles that can then be applied to different components and/or elements of your document. In this course, you are to submit all of your documents as an MS-Word file (either *.doc, or *.docx). I strongly recommend that you learn how to set and apply “Styles”. Whilst it can be rather tricky at first, the learning effort is well rewarded in the long run.

3.1 The hierarchy of headings

Headings are like sign-posts to the various elements of your document and they should be used carefully. With not enough headings, the reader will not be able to (easily) get to the part they are looking for, or, if you use too many headings then your document can appear cluttered and risk becoming very cumbersome to read. For your documents in ENGG3500 you are to limit your use of headings to three types only: (1) major headings, (2) sub-headings, and (3) paragraph headings.

Major headings. Each new component of your document, such as the Introduction, Literature review, Conclusion, etc, is to start with a major heading. The heading: "3. Text Styles" that you can see at the top of this page is an example of a major heading. Major headings are always located at the top of a new page, are sequentially numbered and written in Times New Roman, bold, 16-point font. Every word in a major heading is capitalised. A major heading is single spaced and is always followed by a 24-point space.

Sub-headings. If you do use additional headings within any of your document's components, then these headings (or sub-headings) are to appear as per the sub-heading below: "3.2 Paragraphs". The first number of a sub-heading is taken from the preceding Major Heading's number whilst the second number is sequential, starting at 1 again after each new major heading. Sub-headings are written in Times New Roman, bold, 12-point font, are single spaced and always have an 18-point space before and after them. Only the first word in a sub-heading is capitalised.

Paragraph headings. If any paragraph has an in-text heading (such as this, and the previous two paragraphs) then the heading is Times New Roman, bold, 12-point font and is not numbered. Only the first word in a paragraph heading is capitalised.

3.2 Paragraphs

Paragraph text is to be double-spaced and always has a 6-point space before and after each Paragraph. The words in each paragraph are to be aligned to both the left and right margins of the page (ie: fully-justified text). The first word in any paragraph is not indented.

3.3 Text

All text (apart from that used in headings, Tables and Figures) is to be Times New Roman, regular, 12-point font; however, you may occasionally use bold, italics or underlining to emphasise a point. All words in your document (text, headings, figures, tables, etc) are to be black font.

3.4 Tab stops

The first tab stop is 1 cm from the left hand margin, the second (or subsequent) tab stops are at 1 cm increments.

3.5 Bulleted text

If you have a series of related information, sometimes it can be useful to present this information in a Bullet-Point list. The "bullet-points" themselves are positioned at the first tab stop, with the text starting at the second tab stop. No text is to extend to the left hand side of the 2nd tab stop, in other words, all bulleted text is to be fully justified between the second tab stop and the right margin. The bullet point list below is an example of a properly formatted bullet point list.

Each bullet point:

- has a line spacing of 1.5,
- has a 3-point space before and after each point and
- does not need to start with a capital letter.

3.6 Headers and Footers

Headers and Footers are sometimes used in documents to provide information that is common to each page. The footer shown in this document is the name of the file, and is updated each time the document is saved.

To edit headers and footers (in MS Word), simply double click on the area, and then click outside the area when you have finished editing.

3.7 Page Numbering

Every page in your document is to be numbered, exactly as per the example in the footer. It is to be justified to the right-hand side of the Footer.

4. Referencing

Any material that you use in your document – and that is not yours (ie: someone else's words, concepts, images, equations, tables, figures, etc) – **must** be accompanied by a reference to its source. The idea here is that you cannot ever use someone's Intellectual Property and pass it off as your own. Basically, if you didn't come up with the idea, or material, then you must always be sure to give the reader clarity on who did. To not give complete clarity is effectively "stealing" someone else's work, and you could be accused of plagiarism.

You should have no doubt that plagiarism will **always** be taken very seriously in ENGG3500.

There are many different referencing standards and styles; however, for your document you are to use the standard of the American Society of Civil Engineering (ASCE). The ASCE method is used in many good journal papers thorough the world (even for disciplines other than Civil Engineering); as such, I think it's a good idea that you get practice in this style of referencing. Full details of the ASCE's publishing standards are available at this hyperlink: ASCE Publishing, with specific details on their referencing method given at this link: ASCE Referencing. If you are ever unsure about **ANY** aspect of your referencing, please do not hesitate to post a question on the Course's Blackboard Discussion Forum.

4.1 Credible reference sources.

You should only reference information, material, data, etc, from credible sources. Any source document that has been peer reviewed – such as a journal paper or any reviewed conference paper – is possibly the best to use. You must be very cautious when using information from any source that has not been subject to some sort of independent review. If you use faulty information then your document is similarly faulty, so, the onus is always on you to take reasonable steps to ensure that what you publish is correct.

The internet. Gaining credible information, data, etc, from the open internet can be very tricky; this is because anyone can publish anything they like without any checks on their claims. Some sites – such as Wikipedia – whilst very convenient, regularly have false and/or misleading information. Consequently, you **must not ever** reference untrustworthy internet sites (such as Wikipedia) within your document, if you do, then you will be allocated zero marks for that part of the assessment.

4.2 EndNote.

EndNote is computer software that makes the management of referencing very simple. Whilst learning how to use EndNote can take a little of your time, the long-term benefits are worth the effort. Endnote is available from the University of Newcastle Library (for free) at: EndNote Online

4.3 Author-date referencing

The ASCE reference method is an *author-date* system of referencing, which has two parts: the text citation and the reference list. In your document, you must make sure of two things:

- that every text citation has a corresponding entry in the reference list, and
- that every entry in the reference list has a text citation.

The text citation. The text citation appears in the text, somewhere near to the material that you have sourced from elsewhere. The citation refers the reader to a source in the reference list by the author's surname and the year of publication. Often, the author and date appear in parentheses; a comma is not placed between the name and year:

> *For example:* One recent report (Carson 2006) finds evidence that…
>
> *Or:* …yielded varying results (Jones 2005; Marks and Smith 2004a,b).

Use the first author's surname followed by "*et al*." in citations for publications with three or more authors. When the researcher's name is part of the sentence, the last name does not need to be repeated within the parenthesis:

For example: Carson (2006) found evidence that…

The reference list. Your reference list should appear under the very last Major Heading of your document. References begin with the last names of the author(s) followed by their Initials and then the year of publication in parentheses. References by the same author(s) published in the same year are designated lowercase letters after the year: 2004a, 2004b.

Examples of how to write each part of your reference list are given in the next section. Additional guidance is given afterward (in Figure 2), which is a scan of the University of Melbourne's summary of the ASCE's style referencing.

4.4 A guide to common types of ASCE referenced material

Journal references. Include year, volume, issue, and page numbers:

- Stahl, D. C., Wolfe, R. W., and Begel, M. (2004). "Improved analysis of timber rivet connections." *J. Struct. Eng.,* 130(8), 1272-1279.

Conference proceedings and symposiums. Include the publisher of the proceedings, AND that entity's location—city and state or city and country. Only include the sponsor of the conference if it is part of the title of a proceedings. If there is no "publisher", then the name and location of the sponsor are required:

- Garrett, D. L. (2003). "Coupled analysis of floating production systems." *Proc., Int. Symp. on Deep Mooring Systems,* ASCE, Reston, VA, 152-167.

Books. Include author, book title, publisher, the publisher's location, and chapter title and inclusive page numbers (if a whole book is used, or pages here and there throughout, page numbers need not be given). If no author is listed, alphabetize the entry by book title:

- Zadeh, L. A. (1981). “Possibility theory and soft data analysis.” *Mathematical frontiers of the social and policy sciences*, L. Cobb and R. M. Thrall, eds., Westview, Boulder, CO, 69-129

Reports. Same as for books, as above. For reports authored by institutions: spell out institution acronym on first use, and follow with acronym in parentheses, if applicable. If subsequent references were also authored by that same institution, use only the acronym. For reports authored by persons, include the full institution name (with no acronym) and its location.

Unpublished material. Unpublished material is not included in the references but may be cited in the text as follows: (John Smith, personal communication, May 16, 1983) or (J. Smith, unpublished internal report, February 2003).

In press articles. As an exception to the “Unpublished Material” section above, in press articles (i.e., those that have been accepted but have not yet been published) may be included in the references as follows:

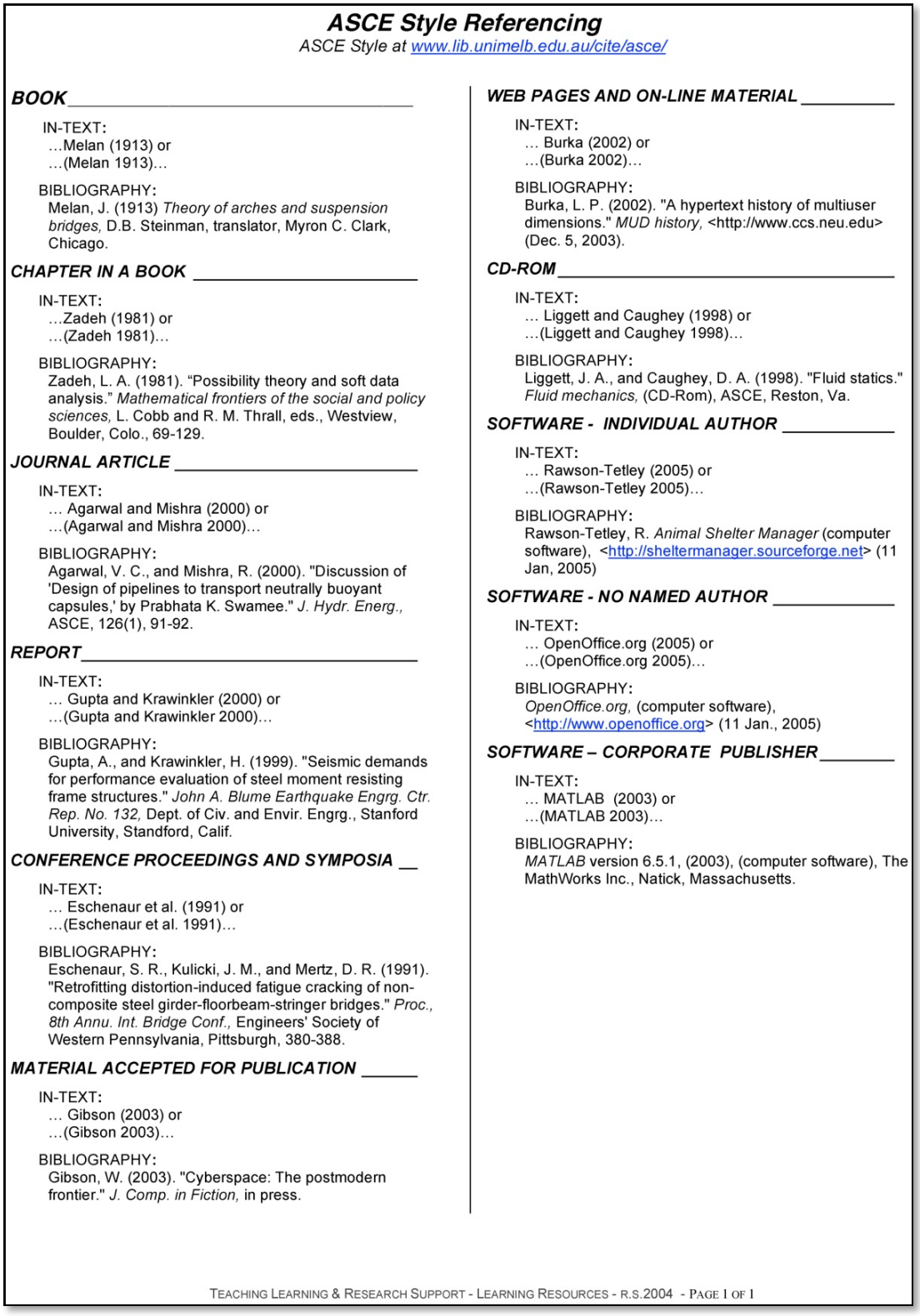
- Dasgupta, G. (2008). “Stiffness matrix from isoparametric closed form shape functions using exact integration.” *J. Aerosp. Eng*., in press.

Web pages. Include author, year of publication or last revision, title of “page,” title of the complete work, Web address enclosed within angle brackets, and date material downloaded:

- Burka, L. P. (1993). “A hypertext history of multi-user dimensions.” *MUD history*, <http://www.ccs.neu.edu> (Dec. 5, 1994).

CD-ROM. Include authors, copyright date, titles, medium, producer/publisher and its location, and section, chapter, and page numbers if available:

- Liggett, J. A., and Caughey, D. A. (1998). “Fluid statics.” *Fluid mechanics* (CD-ROM), ASCE, Reston, VA, Section 3.1, Chapter 2, 167-177.



ASCE Style Referencing

ASCE Style at www.lib.unimelb.edu.au/cite/asce/

BOOK

IN-TEXT:
…Melan (1913) or
…(Melan 1913)…

BIBLIOGRAPHY:
Melan, J. (1913) *Theory of arches and suspension bridges,* D.B. Steinman, translator, Myron C. Clark, Chicago.

CHAPTER IN A BOOK

IN-TEXT:
…Zadeh (1981) or
…(Zadeh 1981)…

BIBLIOGRAPHY:
Zadeh, L. A. (1981). "Possibility theory and soft data analysis." *Mathematical frontiers of the social and policy sciences,* L. Cobb and R. M. Thrall, eds., Westview, Boulder, Colo., 69-129.

JOURNAL ARTICLE

IN-TEXT:
… Agarwal and Mishra (2000) or
…(Agarwal and Mishra 2000)…

BIBLIOGRAPHY:
Agarwal, V. C., and Mishra, R. (2000). "Discussion of 'Design of pipelines to transport neutrally buoyant capsules,' by Prabhata K. Swamee." *J. Hydr. Energ.,* ASCE, 126(1), 91-92.

REPORT

IN-TEXT:
… Gupta and Krawinkler (2000) or
…(Gupta and Krawinkler 2000)…

BIBLIOGRAPHY:
Gupta, A., and Krawinkler, H. (1999). "Seismic demands for performance evaluation of steel moment resisting frame structures." *John A. Blume Earthquake Engrg. Ctr. Rep. No. 132,* Dept. of Civ. and Envir. Engrg., Stanford University, Standford, Calif.

CONFERENCE PROCEEDINGS AND SYMPOSIA

IN-TEXT:
… Eschenaur et al. (1991) or
…(Eschenaur et al. 1991)…

BIBLIOGRAPHY:
Eschenaur, S. R., Kulicki, J. M., and Mertz, D. R. (1991). "Retrofitting distortion-induced fatigue cracking of non-composite steel girder-floorbeam-stringer bridges." *Proc., 8th Annu. Int. Bridge Conf.,* Engineers' Society of Western Pennsylvania, Pittsburgh, 380-388.

MATERIAL ACCEPTED FOR PUBLICATION

IN-TEXT:
… Gibson (2003) or
…(Gibson 2003)…

BIBLIOGRAPHY:
Gibson, W. (2003). "Cyberspace: The postmodern frontier." *J. Comp. in Fiction,* in press.

WEB PAGES AND ON-LINE MATERIAL

IN-TEXT:
… Burka (2002) or
…(Burka 2002)…

BIBLIOGRAPHY:
Burka, L. P. (2002). "A hypertext history of multiuser dimensions." *MUD history,* <http://www.ccs.neu.edu> (Dec. 5, 2003).

CD-ROM

IN-TEXT:
… Liggett and Caughey (1998) or
…(Liggett and Caughey 1998)…

BIBLIOGRAPHY:
Liggett, J. A., and Caughey, D. A. (1998). "Fluid statics." *Fluid mechanics,* (CD-Rom), ASCE, Reston, Va.

SOFTWARE - INDIVIDUAL AUTHOR

IN-TEXT:
… Rawson-Tetley (2005) or
…(Rawson-Tetley 2005)…

BIBLIOGRAPHY:
Rawson-Tetley, R. *Animal Shelter Manager* (computer software), <http://sheltermanager.sourceforge.net> (11 Jan, 2005)

SOFTWARE - NO NAMED AUTHOR

IN-TEXT:
… OpenOffice.org (2005) or
…(OpenOffice.org 2005)…

BIBLIOGRAPHY:
OpenOffice.org, (computer software), <http://www.openoffice.org> (11 Jan., 2005)

SOFTWARE – CORPORATE PUBLISHER

IN-TEXT:
… MATLAB (2003) or
…(MATLAB 2003)…

BIBLIOGRAPHY:
MATLAB version 6.5.1, (2003), (computer software), The MathWorks Inc., Natick, Massachusetts.

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Figure 2. The University of Melbourne's summary of the ASCE's style of referencing.