MECH 226 Formal Report Guidelines

Length and Components

- The report is 2500 words from the Introduction to the end of the Conclusion, +/- 10% (i.e. it should fall within 2250 and 2750 words). Prefatory pages (including Executive Summary), footnotes, references, illustrations, glossaries, and appendices and may be up to 2000 additional words.
- The order of components in the report is as follows: Title Page (see p. 520), Table of Contents (p. 521), List of Tables and Figures (p. 521), Executive Summary (p. 522), Introduction (p. 523), several sections with informative headings (see Project 1 guidelines document for list of required sections; see textbook pp. 524-49 for formatting examples), Conclusion (p. 530), Appendices (p. 569), Glossary (p. 516), and, if applicable, References (pp. 651-63)
- The report is submitted in a plastic cover or duo-tang folder and is appropriately bound. It looks professional.

Formatting

- Standard one-inch margins are used on all pages. The left margin exceeds the binding.
- The report is **single-sided.** The text is double (or 1.5) spaced (see spacing of report on pp. 519-30).
- Times New Roman font, size 12 pt. is used for the text of the report (headings may use a different font, provided it looks professional). Headings are **bolded** (not underlined). The recommended font size for headings is 14 pt. CAPS for primary, and 12 pt. for secondary.
- A running head is used on all pages of the report (including the title page). It is placed in the header and left-justified. (see pp. 521-530). On the title page, it is preceded by the words "Running head:"
- Headings and secondary headings may be numbered. There are no tertiary headings. Headings for front and end matter (e.g. Executive Summary, Glossary, etc.) are not numbered. No punctuation is used at the end of any heading.
- The prefatory pages (a.k.a. front matter, p. 514) are paginated with lower-case Roman numerals (e.g. ii, iii; see p. 522), placed in the header and right justified. (See notes on Title Page and Table of Contents.)
- Starting from the Introduction, pagination uses Arabic numbers (1, 2, 3 ...) placed in the header and right-justified. The Introduction is numbered 1.
- Pagination in Arabic numbers continues to the Conclusion and then through References, Appendices, and Glossary (i.e. pagination continues until the very last page of the report).
- Paragraphs are separated by a blank line and left-justified. No indentation is used. The ragged-right margin is used.
- The text on every page covers at least a quarter of the page. No heading appears by itself at the bottom of a page.

Letter of Transmittal

- The Letter of Transmittal (see p. 519) is not bound or attached to the report in any way.
- It is addressed to the 226 instructor and has a proper salutation.
- It provides contact information and is signed by all team members.
- It states the report title and the purpose.

Title Page

- The Title Page is counted as "i" but it is not numbered. The running head starts on this page.
- The Title Page is not signed. It contains all the necessary information as outlined on page 520. It may contain an image.
- It is not included as an entry in the Table of Contents (see p. 521).

Table of Contents

- The Table of Contents is page ii. The number appears in the top right margin.
- The Table of Contents is not included as an entry in the Table of Contents (see p. 521).
- The order and hierarchy of items in the Table of Contents are logical.
- Section topics and sub-topics are not under- or over-subdivided. The Introduction is not subdivided.
- Items in the Table of Contents are parallel in appearance and grammatical structure.

List of Tables and Figures

- All tables and figures, including those in appendices, appear in the List of Tables and Figures.
- Tables/figures in the main text are numbered 1, 2, 3..., while tables/figures in the appendices are numbered A1, A2, B1, B2...
- Items in the List of Tables and Figures are parallel in appearance and grammatical structure.

Executive Summary

- The Executive Summary (or Executive Abstract) summarizes the entire report but focuses on findings (p. 522). It provides a list of recommendations.
- It provides some context (e.g., purpose of the project) as background information.
- No asterisks or figures are used.
- It is single spaced and does not exceed 10% of the length of the report (no longer than a page).

Introduction

- The Introduction is no longer than a page (see p. 523).
- The focus of the introduction is on the topic and not on the process of writing the report. It contains a well-defined purpose statement.
- It briefly explains the significance of the topic, context, scope, and methodology/organization.
- Generally, the active voice and the present tense of the verb are used.
- Report findings or conclusions are not discussed in the Introduction.
- The introduction ends by mentioning the main sections of the report in the order they appear. It may contain a list.

Body Sections

- All required body sections are present.
- Beneath each primary heading there is a section opening that summarizes the main points and previews the sub-sections. Each secondary heading has a short paragraph underneath it.
- All sections have a brief closing paragraph that summarizes the main points of the section.

Conclusion

- If numbered headings are used, then the heading "Conclusion" is numbered.
- The text of the conclusion is drawn evenly from the body of the report and is sufficiently long (up to one page).
- No new information is presented. However, the conclusion may look ahead into the future or make predictions.
- If necessary, it may include a brief list. The list should be embedded into the text and not placed at the end.
- No asterisks, footnotes, tables or figures are used in the conclusion.

Illustrations and Appendices

- Illustrations are large enough to see and read (see pp. 239, 243, 245).
- Each illustration is first mentioned in the text of the report, then included, labelled and discussed in some detail.
- Each appendix is mentioned in the text of the report. Appendices are numbered in the order they are mentioned in the text (e.g. the first appendix mentioned in the text is Appendix A).
- Appendices and Tables are labeled above; Figures are labeled below.
- Illustrations are clearly printed or drawn in a black pen. Text size inside an illustration is no less than 10 pt.
- Any borrowed illustrations have a reference or source notation written out in full below their labels (see p. 245).

Glossary

- The first page of the text with a new technical term has a footnote. The technical term is asterisked*. The footnote at the bottom of the page explains that asterisked terms are defined in the glossary at the end of the report.
- On subsequent pages of the report, other new technical terms are asterisked*, but no footnotes that mention the glossary are included.
- All items that are asterisked* appear in the Glossary. A clear and accurate sentence definition is provided for each entry.
- Items in the Glossary are parallel in appearance on the page and in grammatical structure.
- The Glossary is not used for abbreviations. The first time an abbreviation is used, it is first written out in full in the main text.

References (if applicable)

- Sentences that describe ideas borrowed from external sources include proper in-text citations in the APA format (Author, date).
- Borrowed quotations are properly formatted and documented (Author, date, page number). They may only be used if they support the main idea of the paragraph (p. 652).
- References are complete and properly formatted in the APA documentation style (see pp. 651-63).
- Proper indentation is used in the References (see p. 653).

Writing Style

- The report is written in an impersonal style and has a professional tone. It uses inclusive language.
- Writing is clear, concise, and persuasive. It is understandable to someone with minimal technical knowledge. It is not excessively wordy.
- The report is coherent. It has a single "voice" and tone (i.e. it does not sound like different people wrote different sections).
- Generally, the active voice is used (there are some exceptions, as discussed in class). The present tense of the verb is used except where you are explicitly describing a process that took place in the past. For example, you would say "Conceptual Solution A <u>uses</u>..." (present tense) but "Conceptual Solution A <u>did</u> not pass the Winnowing stage..." (past tense).
- The text flows smoothly; transitional words and phrases are used.
- The number of grammatical errors is minimal and does not detract from the effect of the report.

Common grammatical errors (see "A Quick Guide to Grammar, Usage, and Mechanics" on p. 664):

Sentence fragment	Missing/wrong word	Misplaced or dangling modifier
Faulty subject-verb agreement	Wrong pronoun case	Unnecessary nominalization
Faulty/ambiguous pronoun-referent agreement	Wrong verb tense or form	Stacked nouns or issues with compound adjectives
Faulty coordination/subordination	Wrong/missing/unnecessary article	Unclear sentence
Faulty parallelism	Missing/incorrect punctuation	Excessive wordiness or unnecessary repetition
Run-on sentence	Comma splice	Idiomatic language or colloquialisms