GE105
Introduction to Engineering Design
College of Engineering
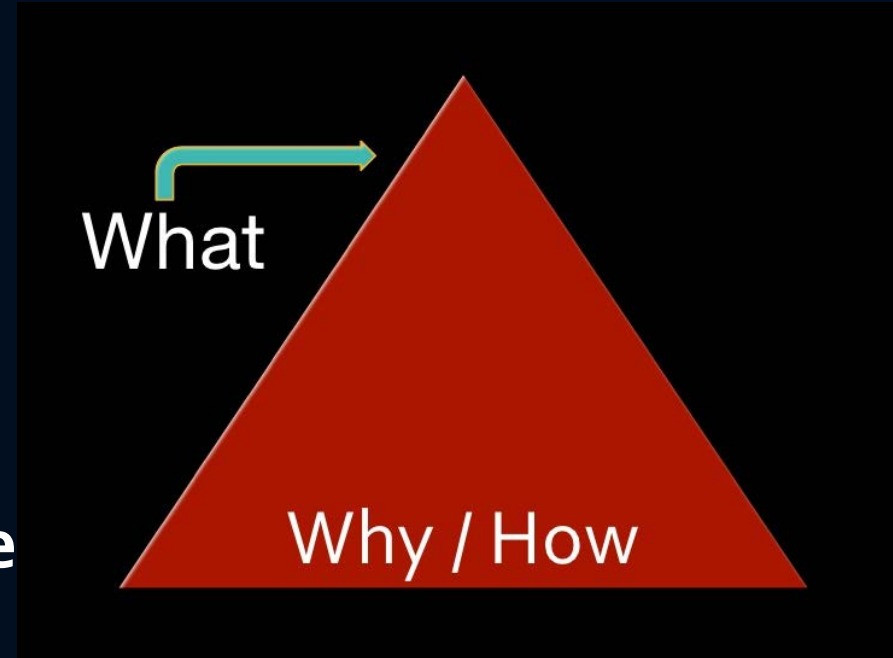King Saud University

Studio 3.
Tips for Writing Reports

FEBRUARY 2016

What is a good report?

- **Meets the audience's needs**
- **Well organised**
- **Readable**
- **Answers the questions:**
  - **What is the purpose of the document?**
  - **What is to be achieved?**

Final Report Layout

Front Matter
Title Page
Abstract
Table of Contents
List of Figures
List of Tables

Body

- Introduction
- Need Analysis: Problem statement, Objectives, Criteria, and Constraints
- Morphological Analysis
- Design Concept Generation
- Design Evaluation/Selection
- Detailed Design

End

- Conclusions/ Recommendations
- References
- Appendices

Title

- **The title is more important than most people think.**

- **Choose a title using as few words as possible (less than 10) to clearly describe the content**

- **It is also a good idea to read through your title and think about how it might be interpreted**

- **The title page should contain the following: Course name, project title, the authors' full names and ID numbers, the name of the instructor, the date of submission**

Abstract (Problem Definition)

- **The abstract is the second level at which a potential reader can filter out reports that s/he is or is not interested in reading**

- **The abstract is generally limited to 150 words (or so). It must be a self-contained description of the report**

- **It includes a short summary of the design problem and the most important results and conclusions of the project**

Conclusions, Summary and Recommendations

- **Summarize what has been done**

- **Highlight the features of the design**

- **Are there any limitations in your design?**

- **What are the implications of your findings?**

- **Recommend a follow-up study for any remaining problems**

SO WHAT DOES IT ALL MEAN ?

Referencing

- **Always cite sources within the report**
- **Use a unified system of referencing***
- **Be careful of web sources**
- **Plagiarism = cheating = penalty**
- **DO NOT cut-and-paste**
- **Give list of references according to a standard style**
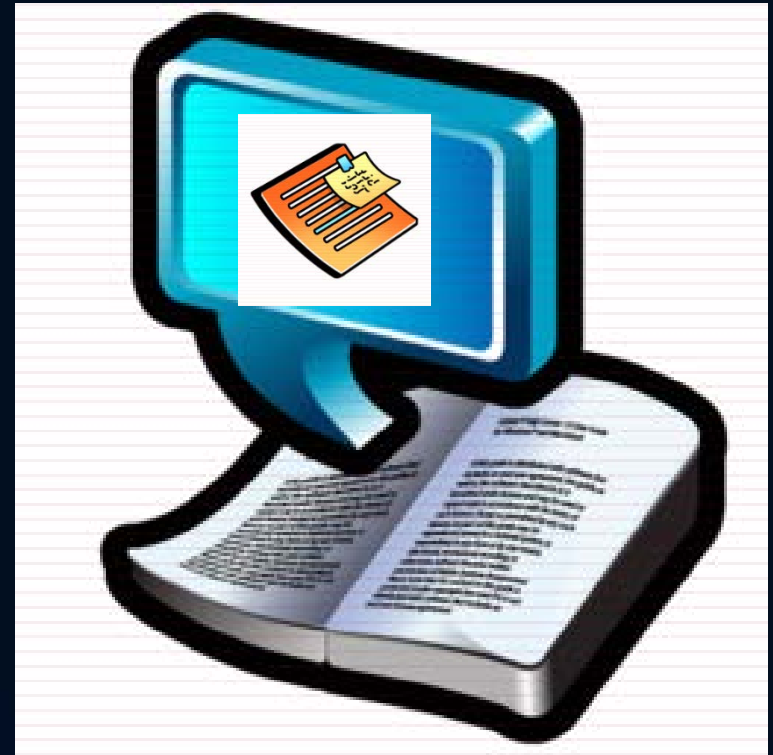
Some Citation Standards

Books

[1] B. Klaus and P. Horn, Robot Vision. Cambridge, MA: MIT Press, 1986.

Handbooks

[7] Motorola Semiconductor Data Manual, Motorola Semiconductor
   Products Inc., Phoenix, AZ, 1989.

Reports

[4] P. Diament and W. L. Lupatkin, "V-line surface-wave radiation and scanning,"
 Dept. Elect. Eng., New York, Sci. Rep. 85, Aug. 1991.

Journals

[3] W. Rafferty, "Ground antennas in NASA's deep space telecommunications," Proc.
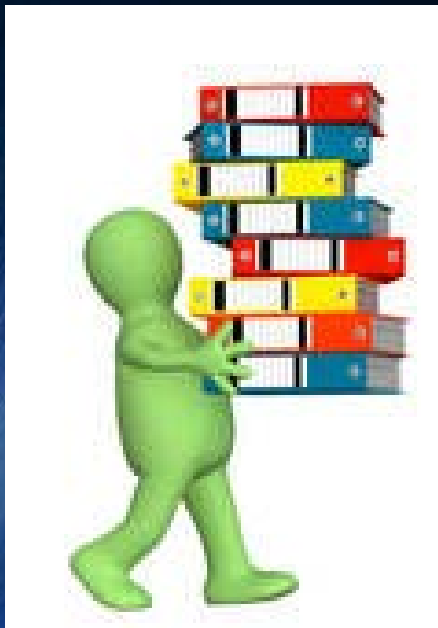IEEE vol. 82, pp. 636-640, May 1994.

Standards

[2] Letter Symbols for Quantities, ANSI Standard Y10.5-1968.

Patents

[1] J. P. Wilkinson, "Nonlinear resonant circuit devices," U.S. Patent 3 624 125, July
16, 1990.

Appendices

- **Things that are related to the project, but not contained in the main components**

- **Examples are:**

  - **Computer codes**

  - **Lengthy specifications**

  - **Supporting tables or other material**

Figure/Table Captions

- **All necessary figures/tables must be included within the main components**
- **ALWAYS include a figure/table caption and number**
- **If the figure (or table) is not yours, put the reference number at the end of the caption**
- **Give the source of data (e.g., data from [5])**
- **The caption of the figure is centered *below* the figure**
- **The caption of the table is centered *above* the table**

Document Formatting

- **Leave one-inch margins all around**

- **Use 1.5 spacing between lines**

- **Title of Report in Initial Capital Letters: (16 points, Boldface)**

- **Sections titles are 14 points, flush left, and boldfaced. Use initial capitals**

- **The text should all be with font size 12pt (Times New Roman is recommended)**

Important Notes

- **Use a predefined style when writing a report to allow for easy modification without the need of renumbering or reformatting**

- **No title should be directly followed by "bullets" or independent sentences"; a paragraph must be used first**

- **The writer should include all the information required for the reader to understand the details without the need to ask questions.**

Important Notes (contn'd)

- **A paragraph must contain at least three sentences**

- **Every reference listed at the end of your report needs to be cited in your text.**

- **Every figure and table must be mentioned in the text. You should not have a figure that just appears out of nowhere.**

- **Numbers less than ten should be written in letters (use "three" not "3")**

# Important Notes (contn'd)

- **Always use complete sentences, except for a figure or table caption.**

- **Do not use contractions; use it is (not it's) and cannot (not can't) ; similarly, do not use haven't, doesn't, wouldn't, etc.**

- **The semicolon is used to separate two sentences that are closely related. If you use a semicolon, look at the expressions on each side.**

Checklist (Before Submission)

Check The following points before submitting your report:

- ✓ **The cover page has all the required information**

- ✓ **The report has all the necessary components**

- ✓ **The entire document is proofread**

- ✓ **The document is checked for spelling errors**

- ✓ **The document is checked for grammar and there are no sentence fragments or run-on sentences in the text.**
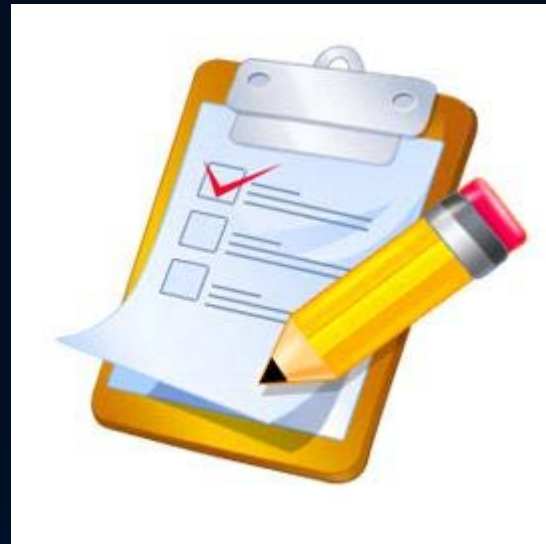
Checklist (contn'd)

- ✓ **There are no contractions (do a global search for the apostrophe and make sure it occurs only in possessives).***

- ✓ **You used paragraphs with more than three sentences**

- ✓ **All of the references that are given at the end of the report are explicitly cited within the report**

- ✓ **All of the figures and tables are mentioned within the text.**