

ENGLISH III

TECHNICAL WRITING AND PRESENTATION SKILLS

COURSE OBJECTIVES:

Enhance language skills and develop critical thinking.

COURSE CONTENT (For Final Term Exam):

a. Technical Report Writing

b. Progress Report Writing

c. Essay Writing:

- ✓ Descriptive
- ✓ Narrative
- ✓ Discursive
- ✓ Argumentative

RECOMMENDED BOOKS:

Technical Writing and Presentation Skills

a) Essay Writing and Academic Writing

- Writing. Advanced by Ron White. Oxford Supplementary Skills. Third Impression 1992. ISBN 0 19 435407 3 (particularly suitable for discursive, descriptive, argumentative and report writing).
- College Writing Skills by John Langan. Mc=Graw-Hill Higher Education. 2004.
- Patterns of College Writing (4th edition) by Laurie G. Kirszner and Stephen R. Mandell. St. Martin's Press.

TECHNICAL REPORT WRITING

- Introduction
- Structure
- Presentation
- Planning the Report

INTRODUCTION

A technical report is a formal report designed to convey technical information in a clear and easily accessible format. It is a document that describes the progress, process, or results of scientific or technical research. Technical reports are often prepared for sponsors of research projects. In order to establish novelty, technical reports can be considered as a primary form of scientific paper when researchers don't want to wait when academic journals publish their work.

STRUCTURE

A technical report contains technical information which should be planned well. A technical report should contain the following sections:

Section	Details
Title page	Must include the title of the report.
Summary/Abstract	A summary of the whole report including important features, results and conclusions.
Contents	Numbers and lists all section and subsection headings with page numbers.
Introduction	States the objectives of the report and comments on the way the topic of the report is to be treated. Must not be a copy of the introduction in a lab handout.
Body of the report	Divided into numbered and headed sections. These sections separate the different main ideas in a logical order.
Conclusions	A short, logical summing up of the theme(s) developed in the main text.
References	Details of published sources of material referred to or quoted in the text (including URL addresses of any websites used).
Acknowledgements	List of people who helped you. Researcher prepare the report, including your proofreaders.
Appendices (if appropriate)	Any further material which is essential for full understanding of your report.

PRESENTATION

Presentation is important part of the final outlook of your work. So, what do you need to do:

Script	The report must be printed single sided on white A4 paper. It should not be hand-written because it's not acceptable.
Formatting	Usually the font size is 12, style is Times New Roman, spacing is 1.5 or 2.
Page Numbers	Do not number the title, summary or contents pages. Number all other pages consecutively starting at 1.
Binding	A single staple in the top left corner or 3 staples spaced down the left hand margin. For longer reports binding is appropriate.

Language, Formatting, And Design Tips

- **Spelling and grammar**

Since technical reports are more academic in nature, you must be very careful with your spelling and grammar. If your report contains these mistakes, it might decrease the credibility of the document and your own credibility too.

- **Style**

Technical reports follow a specific style. You must follow a formal style for this type of report so as not to confuse or irritate your readers. Informal writing isn't appropriate for technical reports so you must keep this in mind.

- **Graphic material**

Most technical report examples contain more than just text. They typically include images, graphics, charts, and more to illustrate or explain the content more effectively.

Here are some tips when it comes to graphic material:

Make sure to label everything. Use captions, titles, and other kinds of text to tell the reader about the graphic material you've inserted. Think about whether you plan to print your report in color or grayscale. If you choose the latter, make sure that the images you use are either in grayscale too or your readers can still understand them even when printed without colors. Only include relevant graphic material. Adding too many images might make your report look cluttered so choose these elements wisely.

PLANNING THE REPORT

- **Collect Your Information:**

Sources include laboratory handouts, the University Library, the reference books and journals in the Department office. Keep an accurate record of all the published references which you intend to use in your report, by noting down the following information;

Journal article:

Author(s)

Title of article

Name of journal (*italic* or underlined)

Year of publication

Volume number (**bold**)

Issue number, if provided (in brackets)

Page numbers

Book:

Author(s)

Title of book (*italic* or underlined)

Edition, if appropriate

Publisher

Year of publication

- **Creative Phase of Planning:**

Write down topics and ideas from your researched material in random order. Next arrange them into logical groups. Keep note of topics that do not fit into groups in case they come in use later. Put the groups into a logical sequence which covers the topic of your report.

STRUCTURING THE REPORT:

Using your logical sequence of grouped ideas, write out a rough outline of the report with headings and subheadings.

Writing The First Draft

Who is going to read the report? For coursework assignments, the readers might be fellow students. In professional contexts, the readers might be managers, clients, project team members. The answer will affect the content and technical level, and is a major consideration in the level of detail required in the introduction.

Begin writing with the main text, not the introduction. Follow your outline in terms of headings and subheadings. Let the ideas flow; do not worry at this stage about style, spelling or word processing.

Make rough sketches of diagrams or graphs. Keep a numbered list of references as they are included in your writing and put any quoted material inside quotation marks.

Write the Conclusion next, followed by the Introduction. Do not write the Summary at this stage.

Revising The First Draft:

This is the stage at which your report will start to take shape as a professional, technical document. In revising what you have drafted you must bear in mind the following, important principle;

- The essence of a successful technical report lies in how accurately and concisely it conveys the intended information to the intended readership.
- Most importantly, when you read through what you have written, you must ask yourself these questions;

- Does that sentence/paragraph/section say what I want and mean it to say? If not, write it in a different way.
- Are there any words/sentences/paragraphs which could be removed without affecting the information which I am trying to convey? If so, remove them.

DIAGRAMS, GRAPHS, TABLES AND MATHEMATICS

It is often the case that technical information is most concisely and clearly conveyed by means other than words. Here are some simple guidelines;

Diagrams	For the diagrams you should draw simple diagrams, and they should appear after or before the content you are discussing so that the reader can be able to understand its relation.
Graphs	Your graph should be well labelled to avoid confusion of the variables. When it comes to graphs, you can use pie charts and even bar graphs to indicate the trend of what you are analyzing.
Tables	A table can help you list points and explain them in brief which helps the reader go through everything in a brief summary.
Mathematics	While writing a technical report that involves some analysis, it is better to use mathematics because it makes the analysis easier and convenient.

THE REPORT LAYOUT

The appearance of a report is no less important than its content. An attractive, clearly organized report stands a better chance of being read. Use a standard, 12pt, font, such as Times New Roman, for the main text. Use different font sizes, bold, italic and underline where appropriate but not to excess.

Headings

Use heading and sub-headings to break up the text and to guide the reader. They should be based on the logical sequence which you identified at the planning stage but with enough sub-headings to break up the material into manageable chunks. The use of numbering and type size and style can clarify the structure as follows;

3 Methods of harnessing wave energy

3.1 Shore-based systems

3.2 Deep-water systems

3.2.1 "Duck" devices

3.2.2 Rafts

References to Diagrams, Graphs, Tables and Equations

In the main text you must always refer to any diagram, graph or table which you use.

- Label diagrams and graphs as follows;

Figure 1.2 Graph of energy output as a function of wave height.

In this example, the second diagram in section 1 would be referred to by "...see figure 1.2..."

- Label tables in a similar fashion;

Table 3.1 Performance specifications of a range of commercially available devices

In this example, the first table in section 3 might be referred to by "...with reference to the performance specifications provided in Table 3.1..."

- Number equations as follows;

$$F(\text{dB}) = 10 \cdot \log_{10}(F) \quad (3.6)$$

In this example, the sixth equation in section 3 might be referred to by "...noise figure in decibels as given by equ (3.6)..."

ORIGINALITY AND PLAGIARISM

Whenever you make use of other people's facts or ideas, you must indicate this in the text with a number which refers to an item in the list of references. Any phrases, sentences or paragraphs which are copied unaltered must be enclosed in quotation marks and referenced by a number. Material which is not reproduced unaltered should not be in quotation marks but must still be referenced.

Information that is not referenced is assumed to be either common knowledge or your own work or ideas; if it is not, then it is assumed to be plagiarised i.e. you have knowingly copied someone else's words, facts or ideas without reference, passing them off as your own. This is a **serious offence**. If the person copied from is a fellow student, then this offence is known as collusion and is equally serious. Examination boards can, and do, impose penalties for these offences ranging from loss of marks to disqualification from the award of a degree.

This warning applies equally to information obtained from the Internet. It is very easy for markers to identify words and images that have been copied directly from web sites. If you do this without acknowledging the source of your information and putting the words in quotation marks then your report will be sent to the Investigating Officer and you may be called before a disciplinary panel.

When you're searching for information on the Internet, keep in mind, that not all the information is reliable. Ensure the sources of information for your report is credible. The best way is to read relevant books, journals, and articles. Sources such as Wikipedia are not reliable and therefore should not be used as your reference. Some of the reference materials that are credible include approved books, articles and journals.

FINALISING THE REPORT AND PROOFREADING

Your report should now be nearly complete with an introduction, main text in sections, conclusions, properly formatted references and any appendices. Now you must add the page numbers, contents and title pages and write the summary.

The Summary

The summary, with the title, should indicate the scope of the report and give the main results and conclusions. It must be intelligible without the rest of the report. Many people may read, and refer to, a report summary but only a few may read the full report, as often happens in a professional organization.

- Purpose - a short version of the report and a guide to the report.
- Length - short, typically not more than 100-300 words
- Content - provide information, not just a description of the report.

Proofreading

This refers to the checking of every aspect of a piece of written work from the content to the layout and is an absolutely necessary part of the writing process. You should acquire the habit of never sending or submitting any piece of written work, without at least one and preferably several processes of proofreading. In addition, it is not possible for you, as the author of a long piece of writing, to proofread accurately yourself; you are too familiar with what you have written and will not spot all the mistakes.

When you have finished your report, and before you staple it, you must check it very carefully yourself. You should then give it to someone else, e.g. one of your fellow students, to read carefully and check for any errors

in content, style, structure and layout. You should record the name of this person in your acknowledgements.

Two Useful Tips;

- Do not bother with style and formatting of a document until the final draft.
- Do not try to get graphics finalized until the text content is complete.