

HUM231 - Presentation Skills and Technical Writing

Lecture 2 : Front Matter





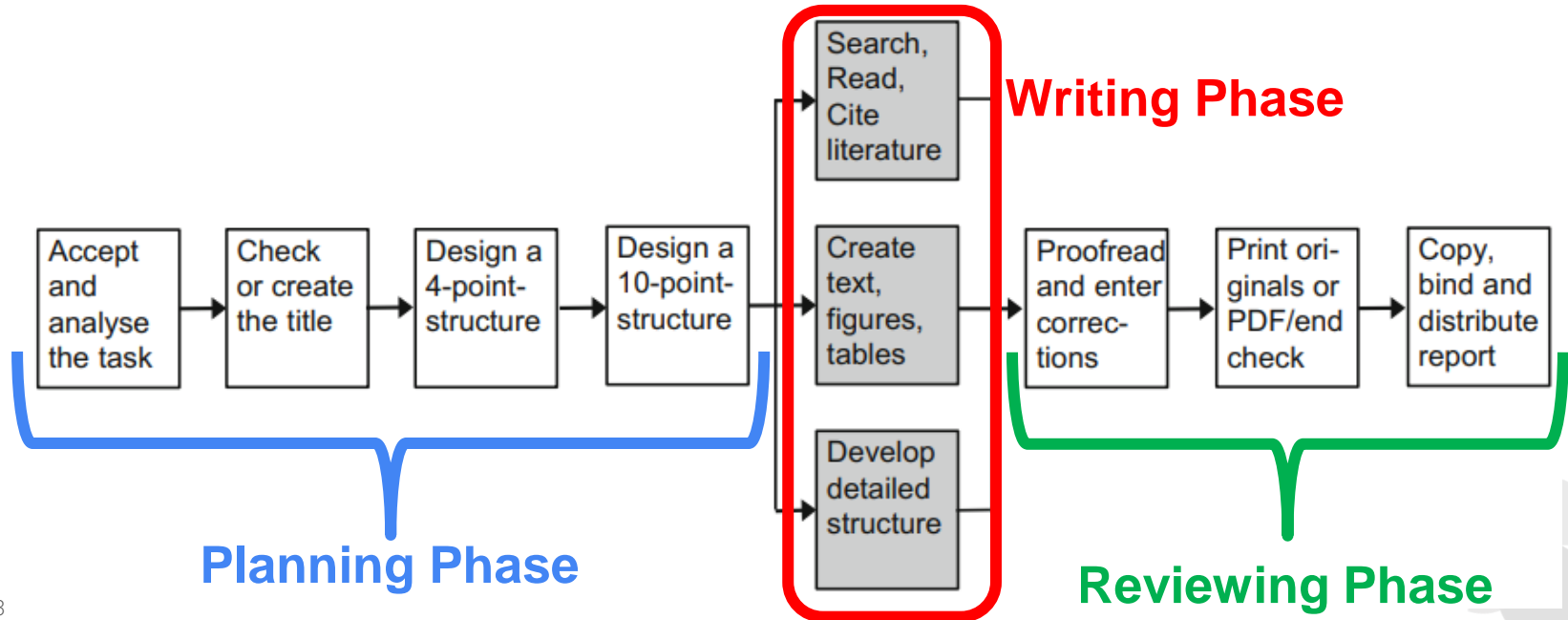
Lecture contents

- Post Planning Phase
- Technical Report Parts
- Front Matter
- Front Matter Elements



Post Planning Phase

- After finishing the phase planning the Technical Report, we will now go into the details of writing and creating the Technical Report.



Post Planning Phase

- Before you start writing the body of the report it is essential to be familiar with the main structure of a technical report.
- This lecture will introduce the main parts of a technical report.
- Note that: Not all parts are necessary or required in all Technical Reports. It varies according to the type of technical report and if it follows a certain template or guidelines.



Technical Report Parts



Technical Report Parts

Front
Matter

Main
Body

Annexes

End
Matter

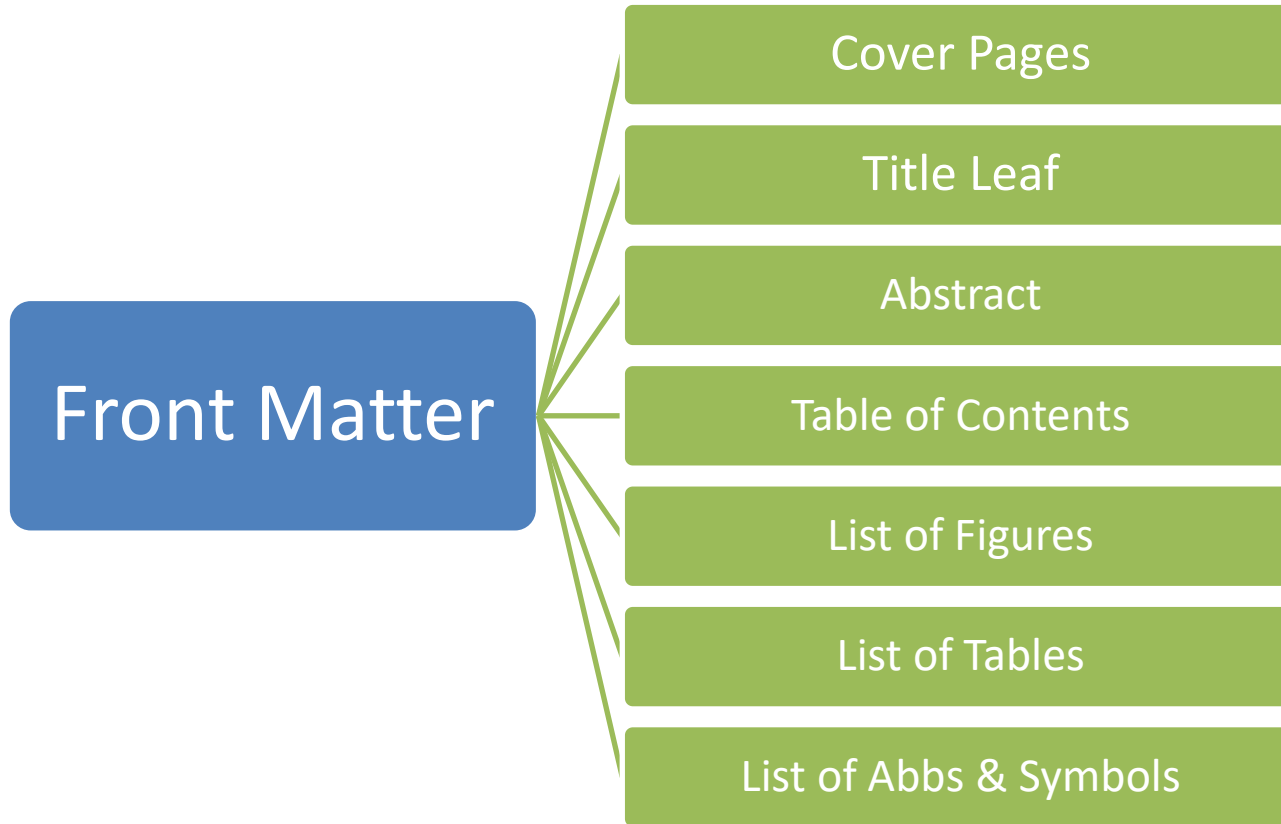


Front Matter

- Front Matter is the introductory part of the technical report that is essential to help the readers find the important information about the report.
- Once found, the front matter will help the reader to quickly decide whether the material contained within the report pertains to what they are investigating.



Front Matter



Front Matter Elements



Front Cover and Title Leaf

- A front cover sheet and/or title leaf is a **must** for a Technical Report.
- You should distinguish the (inner) title leaf from the (outer) front cover sheet.
- **Rule:** the title leaf always contains more information than the front cover sheet.
- The Supervisors names must be listed on the title leaf

Department of
Mechanical Engineering

Hochschule
Hannover



**Design of a lifting platform
for maintenance and repair
of small aircrafts**

Development Report

Michael Bloom
Carl Ramblovsky
Thomas Smith
Lewis Vandenburg

Front Cover and Title Leaf

- The title leaf is **not always required** in technical writing.
- It is **essentially included** in research papers, large reports, theses, studies, proposals, manuals and guides.
- It is **not important** to add the title leaf in short reports, handovers, maintenance sheets, or technical specification reports.

Department of Mechanical Engineering	Hochschule Hannover	
Design of a lifting platform for maintenance and repair of small aircrafts		
Development Report SS 06		
<u>supervised by:</u>	<u>written by:</u>	
Prof. Dr. L. Holz	Michael Bloom, 935648 Carl Remblovsky, 945561 Thomas Smith, 948823 Lewis Vandenburg, 936712	

Front Cover: Minimum Information

Logo and Institution Name

Title of the work in large font

Type of report in a smaller font

Author/s Name/s in medium font

Department of
Mechanical Engineering

Hochschule
Hannover



**Design of a lifting platform
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Development Report

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Title Leaf: Minimum Information

Logo and name of the institution

Title of the work in large font

Type of report in smaller font

Written by: Author/s

Supervised by: Supervisor/s (if applicable)

Date and version number

Department of
Mechanical Engineering

Hochschule
Hannover



**Design of a lifting platform
for maintenance and repair
of small aircrafts**

**Development Report
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supervised by:

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Front Cover and Title Leaf: Common Mistakes

1. The name of the institution is missing on the top of the page.
2. The name of the university is correctly specified, but the name of the department and/or institute are missing.
3. The title (essential) is written in a too small font size, while the type of report (not so important) is much larger than the title.



Front Cover and Title Leaf: Common Mistakes



Design and Calculation 1

**Report about the task:
Automatic gear-switching for a
Bicycle gear-box**

WS 13/14

Mistaken Cover

University for Applied Sciences Hannover
Faculty II - Mechanical Engineering and
Bio Process Engineering

Automatic gear-switching for a bicycle gear-box

Design Report

J. Miller
W. Michalsky
M. Smith
U. Swanson

Correct Cover



Abstract

- Abstract is a brief overview of the purpose, scope, and findings contained in the report.
- You may ask now a good question:

What is the difference between an abstract and a summary?

Abstract

A visual, structural, and functional analysis of a commercially available garden hose nozzle resulted in the discovery of two design flaws within one of the product's internal components. The component, called a stream diverter, experienced multiple failures in two different locations during repeat tests of several samples. This report identifies and describes the design flaws, and offers a potential solution that will increase the structural integrity of the stream diverter. Computer modeling and analysis was used to prove that the redesigned component will be able to better withstand the applied forces that are encountered from other moving components within the garden hose nozzle.

Abstract: difference between abstract and Summary

	Abstract	Summary
Purpose	Provides a brief overview of a larger document, such as a research paper or technical report.	Offers a concise restatement of the main points or findings of a document, often for a broader audience.
Content	Summarizes the main objectives, methods, results, and conclusions. It often includes keywords and is designed to help readers quickly understand the scope and significance of the work.	Can cover various features of the document, including key findings, or recommendations, but is less organized than an abstract.
Length	Typically, 150-300 words.	Can vary widely in length, depending on the context and audience.
Placement	Usually appears at the beginning of a document, often before the introduction.	May appear at the end of a document, within a report.

Table of Contents (TOC)

- The Table of Contents (TOC) lists the title and beginning page number of each major section within the report.
- TOC is usually constructed in the final steps of writing a report after the page numbers are added and the format is justified.

✗	5.1 Experiment set-up	35–36
✓	5.1 Experiment set-up	35

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3.0 Methods, Assumptions, and Procedures	4
4.0 Results and Discussion	8
5.0 Conclusion	12
6.0 Recommendations	17
7.0 References	19
Appendixes	20
List of Symbols, Abbreviations, and Acronyms	26

Table of Contents (TOC)

- Note that: the page numbering starts from first page in the **report body** excluding the **front matter** pages.
- Sometimes the front matter is numbered in special numbering theme different from the traditional one.
- i.e: report body is numbered 1,2,3,..etc. while front matter is numbered i,ii,iii,..etc.

TABLE OF CONTENTS	
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List of Figures & List of tables

- The list of figures and the list of tables help the reader to locate illustrations, drawings, photographs, graphs, charts, and tables of information contained in the report.
- The figure/table number and caption is listed with the page it is placed in.

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List of Abbreviations and Symbols

- The list of abbreviations and symbols are placed in a report to help the reader understand different abbreviations and symbols and what they stand for.
- If more than **five symbols**, abbreviations, or acronyms are used in the report, they are to be listed with their explanation.
- Abbreviations and symbols are usually listed in **alphabetical** order.

LIST OF SYMBOLS, ABBREVIATIONS, & ACRONYMS

List of Symbols

A	=	Shear Area
G	=	Shear Modulus of Elasticity
V	=	Shear Force
τ	=	Shear Stress
\varnothing	=	diameter
\perp	=	bore depth

List of Abbreviations

THRU	=	Through Hole
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List of Acronyms

CAD	=	Computer Aided Design
FEA	=	Finite Element Analysis

Questions??

