

**UNDERGRADUATE THESIS WRITING GUIDELINES
SCHOOL OF MECHANICAL AND MANUFACTURING ENGINEERING
MAPÚA UNIVERSITY**

In writing your manuscripts observe the following guidelines:

A. MARGINS

Top 1.0 inch Bottom 1.0 inch Right 1.0 inch Left 1.25 inches

B. FONT

The font type of all text is Times New Roman (TNR), size 12 unless otherwise specified.

C. PAGINATION

- Pages with titles of major sections e.g. Chapter 1: Introduction, is written half inch from the bottom, center page.
- Pages with no titles of major sections the page number is written on the upper right corner, half inch from the top, one inch from the right.

D. APPROVAL SHEET

Please refer to: <https://bit.ly/2VZrS8x>

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F. LIST OF TABLES, FIGURE, ETC.

LIST OF TABLES	
<i>(centered, Times New Roman, size 12, bold font style)</i>	
Line spacing: double; space before: 0 pt; space after: 0 pt	
Table 1.1:	Title ...
Table 1.2:	Title ...
Table 2.1:	Title ...
Table 2.2:	Title ...

G. LIST OF FIGURES

LIST OF FIGURES	
<i>(centered, Times New Roman, size 12, bold font style)</i>	
Line spacing: double; space before: 0 pt; space after: 0 pt	
Figure 1.1:	Title ...
Figure 1.2:	Title ...
Figure 2.1:	Title ...
Figure 2.2:	Title ...

H. LIST OF APPENDICES

LIST OF APPENDICES

(centered, Times New Roman, size 12, bold font style)

Line spacing: double; space before: 0 pt; space after: 0 pt

Appendix A: Title ...

Appendix B: Title ...

I. TITLE PAGE

Title

(centered, Times New Roman, size 20, bold font style)

6-single spaces; space before: 0 pt; space after: 0 pt; TNR,12

A Thesis

Presented to the

School of Mechanical and Manufacturing Engineering

Mapúa University

(centered, Times New Roman, size 14, bold font style)

3-single spaces; space before: 0 pt; space after: 0 pt; TNR,12

In Partial Fulfillment

Of the Requirements for the Degree of

Bachelor of Science in Mechanical Engineering

(centered, Times New Roman, size 14, bold font style)

3-single spaces; space before: 0 pt; space after: 0 pt; TNR,12

by

(centered, Times New Roman, size 14, bold font style)

3-single spaces; space before: 0 pt; space after: 0 pt; TNR,12

Surname, First Name Middle Initial <student 1>

Student Number <student 1>

(centered, Times New Roman, size 14, bold font style)

1-single space; space before: 0 pt; space after: 0 pt; TNR,12

Surname, First Name Middle Initial <student 2>

Student Number <student 2>

(centered, Times New Roman, size 14, bold font style)

1-single space; space before: 0 pt; space after: 0 pt; TNR,12

Surname, First Name Middle Initial <student 3>

Student Number <student 3>

(centered, Times New Roman, size 14, bold font style)

1-single space; space before: 0 pt; space after: 0 pt; TNR,12

Surname, First Name Middle Initial <student 4>

Student Number <student 4>

(centered, Times New Roman, size 14, bold font style)

2-single spaces; space before: 0 pt; space after: 0 pt; TNR,12

Month Year <of final presentation>

(centered, Times New Roman, size 14, bold font style)

Example:

<p style="text-align: center;">Chapter 1</p> <p style="text-align: center;">INTRODUCTION</p> <p style="text-align: center;">Text text text text text text text text text text text text text text text.</p> <p>1.1 Overview and Background (<i>Times New Roman, size 12, bold font style</i>)</p> <p style="text-align: center;">Text text text text text text text text text text text text text text text.</p> <p>1.2 Statement of the Problem (<i>Times New Roman, size 12, bold font style</i>)</p> <p style="text-align: center;">Text text text text text text text text text text text text text text text.</p>

Line Spacing: double space

Spacing before: 0 pt

Paragraph indentation: 1.50 cm

Alignment: Justified

Line spacing before the first level heading and the body: 1-double space; 0 pt before and after

Line spacing in the body: double space; 0 pt before and after

No extra space will be given after the last sentence and another paragraph

One space between period and another sentence

Content of Introduction:

The introduction gives an overview of the thesis giving the readers a background of the problems and solutions to be reported. It is divided into five parts as follows:

1. Overview and Background

This part serves the general statement about the area of research to provide the reader a preview of the problem reported. This gives the nature of the problem wherein the researcher can cite facts, statistics, and studies that are related how the researcher arrived at the problem considered.

2. Statement of the Problem

This part continues the contexts stated in Part 1 by indicating the gaps of related studies already conducted by other researchers. In response to these gaps, the researcher should construct the specific statements that indicate the need for the study or the need for further investigation.

3. Objectives of the Study

This part presents the general and specific objectives in order to fill the gaps and solve the problem/s stated in Part 2.

General Objective: A reflection of the title but more detailed.

Specific Objectives: Must mention the projects specifics such as the capacity of the prototype, the variables to be measured, the method or software to be used, the specific set of standards, protocols to be used, etc. Avoid the phrase ‘To be able to ...’.

4. Significance of the Study

This part presents the value added by your project or research. It answers the question ‘‘Why do you need to conduct your research? What is the value/s added? What will be the benefits from the study? Who will be the beneficiaries?’’.

5. Scope and Limitations

This part indicates what the study covers and what it does or fails to cover. It also indicates to what extent does the research cover that the researcher decides to conclude.

For Chapter 2:

Chapter 2

(Capitalized the first letter only, bold font style, center page, TNR, size 12)

REVIEW OF RELATED LITERATURE

(FIRST LEVEL HEADING, ALLCAPS, bold face, center page, TNR, size 12)

Example:

Chapter 2

REVIEW OF RELATED LITERATURE

Text text text text text text text text text text text text text text text text

2.1 Title of Study 1 (In-text Citation) *(Times New Roman, size 12, bold font style)*

Text text text text text text text text text text text text text text text text.

2.2 Title of Study 2 (In-text Citation) *(Times New Roman, size 12, bold font style)*

Text text text text text text text text text text text text text text text text.

Line spacing:

First heading	double space	Spacing before: Auto	Spacing after: Auto
Body	double space	Spacing before: 0 pt	Spacing after: 0 pt
Next heading	double space	Spacing before: 30 pt	Spacing after: Auto
Body	double space	Spacing before: 0 pt	Spacing after: 0 pt

For the body:

- Only the first sentence of the paragraph is indented by 1.50 cm.
- The alignment is justified.
- No extra space will be given after the last sentence and another paragraph.

Content of the RRL:

The review of literature is a synthesized and organized collection of other studies which are likely to be related to your own specific research. It is not a mere summary of the previous studies. The last paragraph of the body should explain how the chosen literature can help you on your research. This is divided into two types: (a)RRL on topic and (b)RRL on methodology.

Citation of Sources:

- All references must be cited in the review of related literature.
- The American Psychological Association (APA) will be the standard format for citations.

Examples as follows for nonverbatim statements:

- One author:
 - a. **Smith** stated in **2017** that
 - b. **Smith (2017)** stated that
 - c. It has been said that **(Smith, 2017)**
- Two authors:
 - a. **Smith and White** stated in **2017** that
 - b. **Smith and White (2017)** stated that

Line spacing:

First heading	double space	Spacing before: Auto	Spacing after: Auto
Body	double space	Spacing before: 0 pt	Spacing after: 0 pt

Note:

- Limit each heading to contain two (2) subheadings only. Do not attempt to make only one (1) sub-heading for one heading.

Example:

3.1 Heat Transfer

Text text text text text text text text text text text text text text text text text text text text text.

3.1.1 Conduction

Text text text text text text text text text text text text text text text text text text.

*3.1.1.1 Fourier's Law****

Text text text text text text text text text text text text text text text text.

3.1.2 Convection

***see the red part when the author introduced 3.1.1.1 but there is no 3.1.1.2. No do commit the same mistake.

For the body:

- Only the first sentence of the paragraph is indented by 1.50 cm.
- The alignment is justified.
- No extra space will be given after the last sentence and another paragraph.

For Chapter 4:

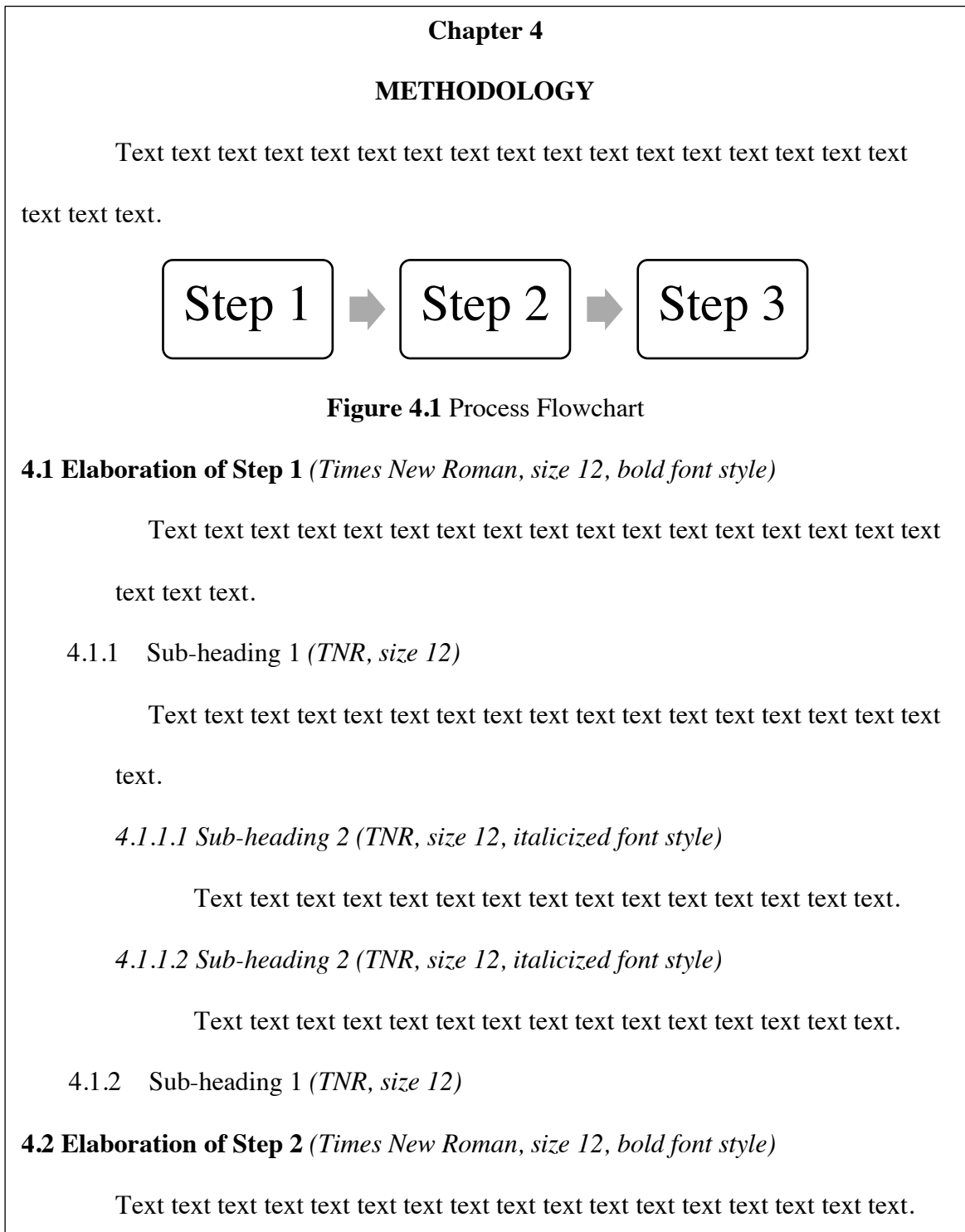
Chapter 4

(Capitalized the first letter only, bold font style, center page, TNR, size 12)

METHODOLOGY

(FIRST LEVEL HEADING, ALLCAPS, bold face, center page, TNR, size 12)

Example:



Content of Methodology:

This includes detailed description of all materials and methods that will be used in the course of the study. It also includes the mathematical treatment of data as well as equations or models used. Procedures should be stated in as much detail as possible so that readers can easily perform them as they read your work. Schematic diagram (properly labeled and numbered) must accompany the text whenever possible.

For Chapter 4:

Chapter 5

(Capitalized the first letter only, bold font style, center page, TNR, size 12)

RESULTS AND DISCUSSION

(FIRST LEVEL HEADING ALLCAPS, bold face, center page, TNR, size 12)

Example:

Chapter 5

RESULTS AND DISCUSSION

Text text text text text text text text text text text text text text text text text
text text text.

5.1 Elaboration of Results 1 *(Times New Roman, size 12, bold font style)*

Text text text text text text text text text text text text text text text text text
text text text.

5.1.1 Sub-heading 1 *(TNR, size 12, regular font style)*

Text text text text text text text text text text text text text text text text text
text.

5.1.1.1 Sub-heading 2 *(TNR, size 12, italicized font style)*

Text text text text text text text text text text text text text text text.

5.1.1.2 Sub-heading 2 *(TNR, size 12, italicized font style)*

Text text text text text text text text text text text text text text text.

5.1.2 Sub-heading 1 *(TNR, size 12, regular font style)*

5.2 Elaboration of Results 2 *(Times New Roman, size 12, bold font style)*

Text text text text text text text text text text text text text text text text text.

Content of Results and Discussion:

This section presents the data collected from the study on this major aspect of your research problem, followed by extensive comments on or interpretation of the findings of the study. The results from the related studies can also be compared with your results. If there are discrepancies, explain the reasons and if there are significant findings, explain the reason for these results.

For Chapter 6:

Chapter 6

(Capitalized the first letter only, bold font style, center page, TNR, size 12)

CONCLUSION AND RECOMMENDATION

(FIRST LEVEL HEADING, ALLCAPS, bold face, center page, TNR, size 12)

Example:

Chapter 6

CONCLUSION AND RECOMMENDATION

Text text text text text text text text text text text text text text text text text text text text text.

6.1 Conclusion *(Times New Roman, size 12, bold font style)*

Text text text text text text text text text text text text text text text text text text text text text.

6.2 Recommendation *(Times New Roman, size 12, bold font style)*

Text text text text text text text text text text text text text text text text text text.

NOTE: The Conclusion is written continuously paragraph by paragraph, i.e. without any subheading. Same applies to the Recommendation section.

Contents of the Conclusion and Recommendation:

The conclusion section addresses the objective/s pertaining to the major aspect of your research problem. The recommendation section indicates the statements that suggest the need for further studies-what else can be done relevant to your research problem and what other related problems can be addressed? Further research can also be done by using different methodology to compare and verify results.

H. ILLUSTRATIONS

For Tables, please label it this way:

Table No. Title

Label	Label	Label
Data	Data	Data
Data	Data	Data

Example:

Table 3.1 Compression Test Results		
Sample	Stress (MPa)	Strain
1	100	0.06
2	120	0.07

Table No.	bold font style	Title	regular font style
Upper Border	Thick line	1.5 pt	
Lower Border	Thick line	1.5 pt	
Below Upper Border	Thin line	1.0 pt	
Line Spacing: single	Alignment: center	Space before: 0 pt	Space after: 0 pt

For graphs, figures, illustrations:

Example:



Figure 3.1 Title

Properties:

- If label is necessary, place it inside the plot area
- No fill effects
- No outer border
- Inside tick
- Smooth lines
- No triangles or diamonds
- Title at the bottom of the graph (No more title at the top of the chart)

Example:

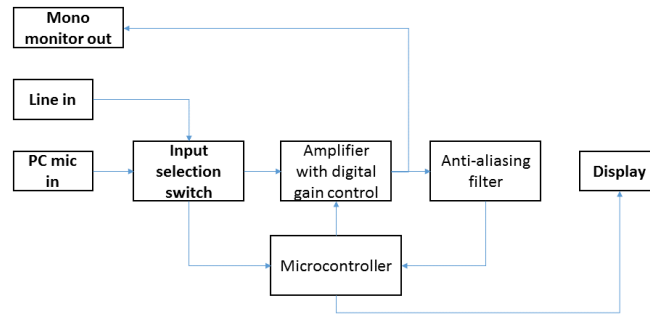


Figure 3.2 Title

For Equations:

Number the equations in this manner:

$$x^3 + y^2 + z = 1 \tag{1.2}$$

Where:

- x = cubic term
- y = quadratic term
- z = linear term

The first number denotes the chapter and the second number denotes the number of equation in that chapter. The equation number must be right justified and must be written in Times New Roman, size 12, regular font style.

For illustrations with sources:

The source of the photo or illustration must be given in this manner:

Source: Author, Year (must be aligned with the label)

For instruments used in the experimentations:

Name of the instrument (Model/Brand, Supplier, Place)

For computer softwares used in the study:

Name of the software (Name of software, Version)

I. APPENDICES

- The word Appendix is all capitalized, bold font style, center of page, included in the numbering but not numbered.
- Name each appendix as A, B, C, etc.
- Write the title of the appendix using Second Level Heading
- For appendix having a landscape format place the pagination on the lower right corner.

Example:

<p>APPENDIX A <i>(FIRST LEVEL HEADING, bold face, center page)</i> Calibration of Equipment <i>(Second Level Heading, bold face, center page)</i></p>

J. REFERENCES

For references and bibliography, one must follow the following format set by the American Psychological Association (APA). It is recommended to use the Mendeley application to facilitate correct formatting of sources. You may also visit this website: <http://www.easybib.com/reference/guide/apa/book> and click on APA guide.

Formatting and Example Formatting:

REFERENCES (*TNR, size 12, bold font style*)

2-single spaces; space before: 0 pt; space after: 0 pt; TNR,12

Jacobi, W. G. (1994). Public attitudes toward government spending. *American Journal of Political Science*, 38(2), 336-361.

1-single space; space before: 0 pt; space after: 0 pt; TNR,12

James, H. (1937). *The ambassadors*. New York, NY: Scribner. (*TNR, single space, regular font style*)