



LATEX THESIS TEMPLATE: AN UNOFFICIAL VERSION

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AUTHOR NAME

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A THESIS SUBMITTED TO
VIDYASIRIMEDHI INSTITUTE OF SCIENCE AND TECHNOLOGY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY
IN INFORMATION SCIENCE AND TECHNOLOGY

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2023

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Title:	L<small>A</small>T<small>E</small>X Thesis Template: An Unofficial Version
Advisor:	Asst. Prof. Dr. Advisor Name
Name:	Mr. Author Name
Program:	Doctor of Philosophy Program in Information Science and Technology (International Program)
Examination Date 10 October 2023	

Vidyasirimedhi Institute of Science and Technology approved this thesis as a partial fulfillment of the requirements for the degree of Doctor of Philosophy in Information Science and Technology.

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Examination Committee:

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..... Chairperson
(Asst. Prof. Dr. Committee Member 1)

..... Member
(Asst. Prof. Dr. Committee Member 2)

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LAT_EX Thesis Template: An Unofficial Version (Font Size 16 pt)

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Abstract (Font Size 14 pt)

Author Name (Font Size 14 pt)

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This abstract presents a dummy content block intended to simulate a real thesis abstract. It spans multiple paragraphs and includes enough text to overflow onto the second page. The purpose of this demonstration is to observe how L_AT_EX handles hanging indents and vertical spacing, especially in custom environments such as keywords.

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Keywords: No more than 5 words, L_AT_EX formatting, Thesis template, Abstract layout,
Hanging indent.

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Acknowledgment (Font Size 16 pt)

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I would like to express my sincere gratitude to everyone who has supported me throughout this journey.

First and foremost, I am deeply thankful to my advisor, Dr. Jane Smith, for her invaluable guidance, constructive feedback, and constant encouragement. Her mentorship has been instrumental in shaping both the direction of this research and my development as a researcher.

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Special thanks to my friends and colleagues, whose humor, advice, and moral support helped me maintain perspective during stressful times.

Lastly, I owe my deepest appreciation to my family for their unwavering belief in me. Their love and patience provided the foundation that carried me through the ups and downs of graduate life.

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This work would not have been possible without all of you.

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Author Name

10 October 2023

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List of Abbreviations (Font Size 16 pt)

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EEG

Electroencephalogram

MI

Motor Imagery

CNN

Convolutional Neural Network

H₂O

Water

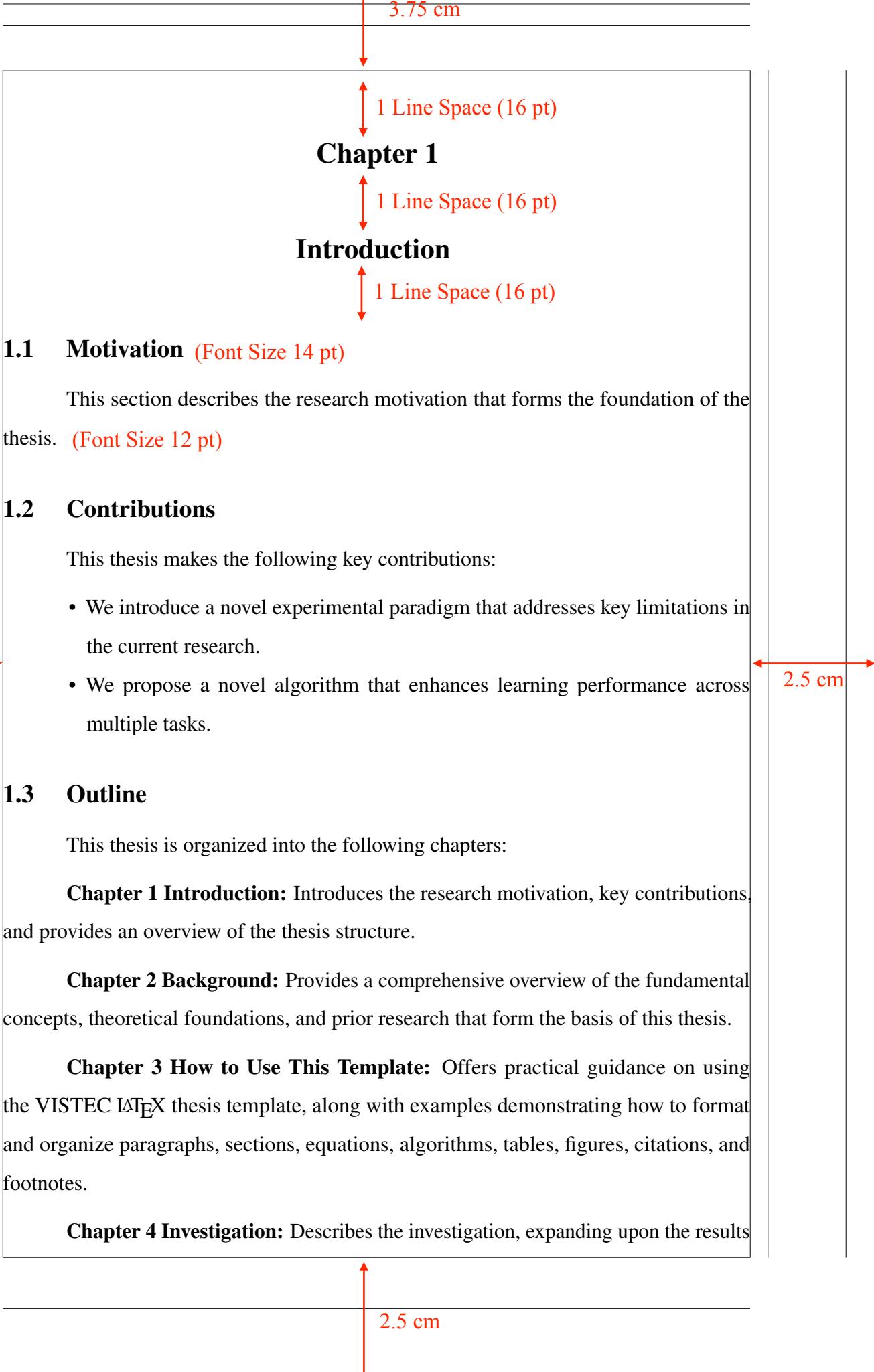
DBU

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and analysis from the previous study to validate the proposed approaches.

Chapter 5 Conclusion: Summarizes the major findings, discusses their implications, and suggests future research directions.

Appendix A Proofs Supporting Investigation: Presents supplementary materials, including detailed proofs, additional results, and extended discussions that support the main chapters.



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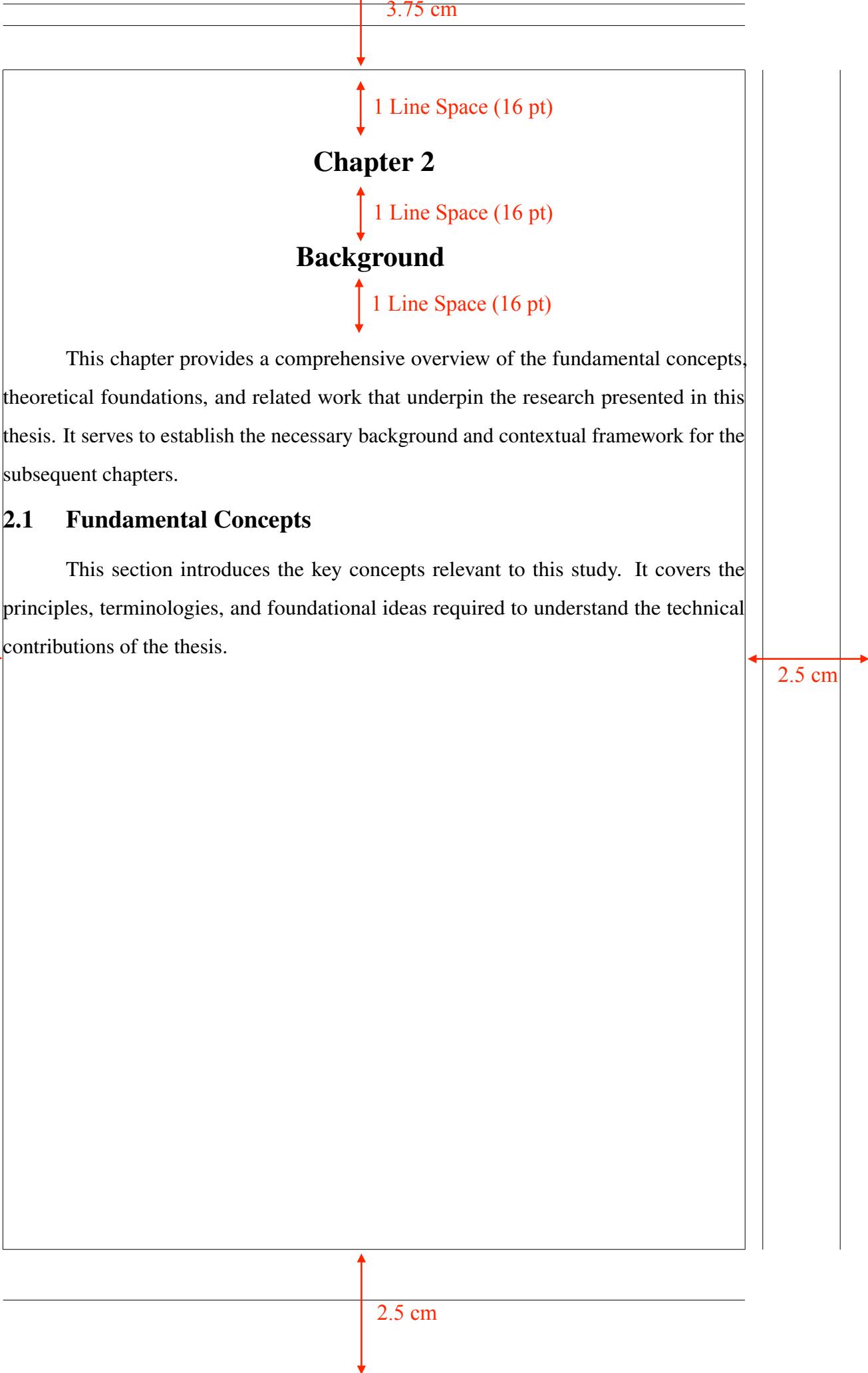


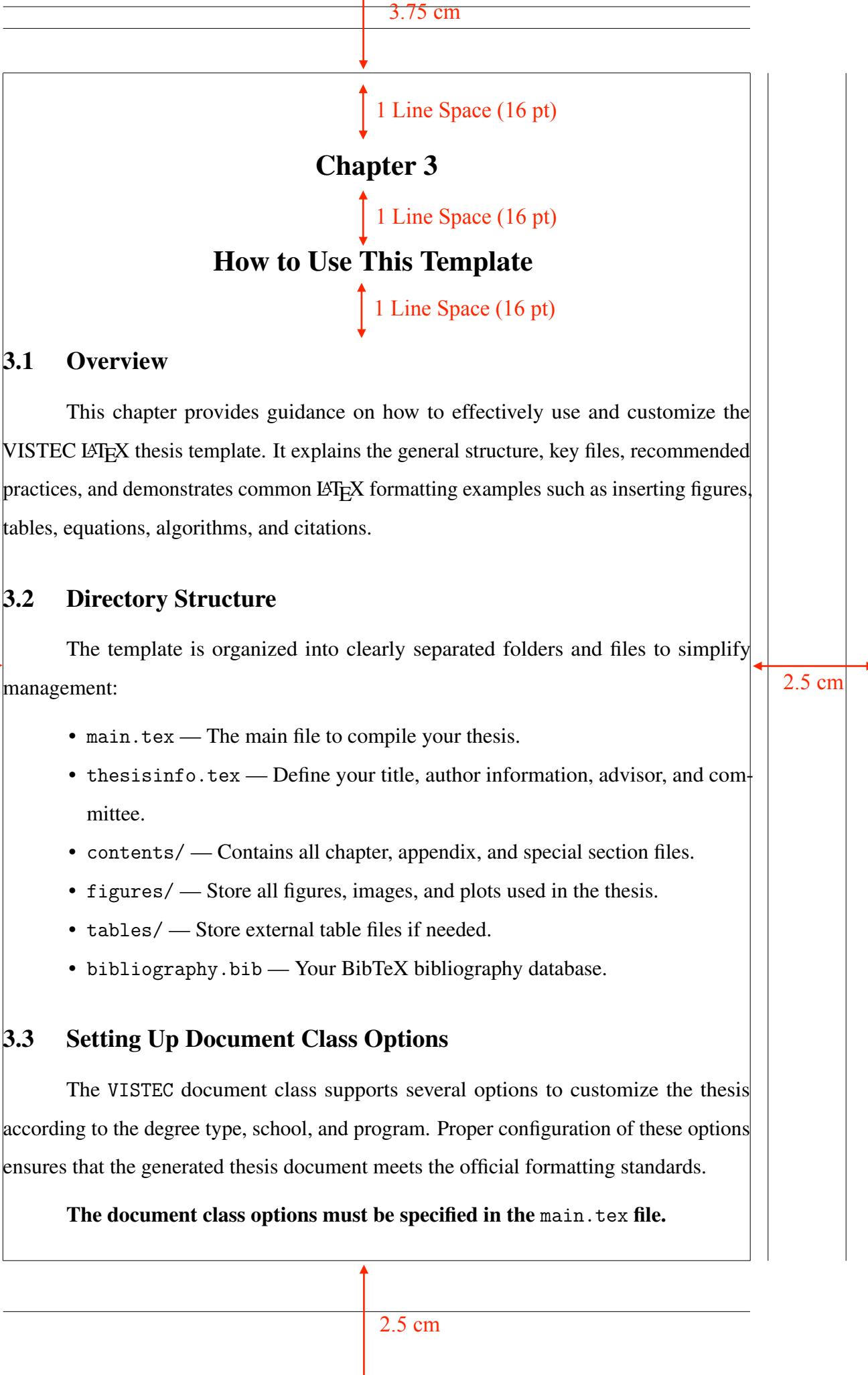
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3.3.1 Required Options

Two required options must be specified when declaring the document class in `main.tex`:

- **Degree Type:**
 - `phd` — for `\degreefield{Doctor of Philosophy}`
 - `master` — for `\degreefield{Master of Engineering}`
- **School and Program:**
 - `ist` — School of Information Science and Technology
(Program: Information Science and Technology)
 - `mse` — School of Molecular Science and Engineering
(Program: Materials Science and Engineering)
 - `ese` — School of Energy Science and Engineering
(Program: Chemical Engineering)
 - `bse` — School of Biomolecular Science and Engineering
(Program: Biomolecular Science and Engineering)

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If your program is not among the predefined options, you must manually specify the `\degreefield`, `\school`, and `\program` fields in `thesisinfo.tex`.

3.3.2 Optional Options

The document class also provides optional settings that control additional layout features:

- `final` — (default) Compiles the document in its final version.
- `showframe` — Displays page layout frames (e.g., margins, headers, text block areas).
- `showgrid` — Displays a background grid to help visualize element positioning.

These options are useful during the drafting and formatting stages but should be disabled for the final submission. They are set in the document class declaration line in `main.tex`.

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The diagram illustrates the layout of a document page with various sections and their descriptions. Red arrows and text indicate specific dimensions and features.

Section 3.3.3 Example Usage

The document class options are configured in the preamble of the `main.tex` file. Example configurations include:

- `\documentclass[phd, ist]{VISTEC}`
Ph.D. thesis, IST School (Information Science and Technology Program)
- `\documentclass[master, mse]{VISTEC}`
Master's thesis, MSE School (Materials Science and Engineering Program)
- `\documentclass[phd, ese, showframe]{VISTEC}`
Ph.D. thesis, ESE School (Chemical Engineering Program) with layout frames displayed

Section 3.4 Editing Thesis Metadata

Edit `thesisinfo.tex` to set your thesis title, author name, student ID, academic year, advisor, committee members, and program information. These metadata fields automatically populate the title page, approval page, and other formal sections.

Section 3.5 Adding Content to Chapters

Each main chapter (e.g., Introduction, Background, Investigation, Conclusion) should be placed under `contents/` and included using `\include{}` in `main.tex`. You can create additional chapter files following the provided structure, and organize sections, figures, tables, algorithms, and citations inside them.

Section 3.6 How to Use L^AT_EX

If you are new to L^AT_EX, it is recommended to start with basic tutorials to understand fundamental concepts such as document structure, commands, environments, and referencing. A good starting point is the Overleaf online guide available at:

<https://www.overleaf.com/learn>

The Overleaf Learn platform provides comprehensive, beginner-friendly resources

Dimensions shown in the diagram:

- Top margin: 3.75 cm
- Left margin: 3.75 cm
- Right margin: 2.5 cm
- Total width of content area: 6 cm
- Bottom margin: 2.5 cm

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covering topics from basic document setup to advanced formatting and bibliography management. Familiarity with these concepts will significantly improve your ability to customize and work efficiently with this thesis template.

3.7 Compiling the Thesis

Use pdfLaTeX as the compiler. A typical compilation sequence includes:

- First, run `pdflatex main.tex` to generate auxiliary files.
- Then, run `bibtex main` to generate the bibliography.
- Finally, run `pdflatex main.tex` twice to resolve cross-references.

Alternatively, tools like `latexmk` or IDEs such as Overleaf, TeXShop, and VS Code with L^AT_EX Workshop can automate this process.

3.8 Basic Formatting Examples (Font Size 14 pt)

This section illustrates basic L^AT_EX formatting examples for headings, equations, algorithms, tables, figures, citations, and footnotes. (Font Size 12 pt)

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3.8.1 Subheadings (Font Size 12 pt)

This subparagraph provides an example of text placed under a subsection heading. It serves to introduce and briefly describe the specific content or focus of the subsection. (Font Size 12 pt)

3.8.1.1 Second-Level Subheading (Font Size 12 pt)

This is a subsubparagraph under the second-level subheading. It is typically used for listing or elaborating fine-grained points. (Font Size 12 pt)

- 1) This is the first item in the enumerated list.
- 2) This is the second item in the enumerated list.
- 3) This is the third item in the enumerated list.

3.8.2 Equations

The following is an example of formatting mathematical equations. As

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illustrated in Equation 3.1, the *Rényi entropy* is defined as:

$$H_\alpha(X) = \frac{1}{1-\alpha} \log \left(\sum_{x \in X} P[X=x]^\alpha \right). \quad (3.1)$$

3.8.3 Algorithms

Algorithms can be presented using the `algorithmic` package, as shown in Algorithm 3.1.

Algorithm 3.1 An example algorithm with a caption.

Require: $n \geq 0$

Ensure: $y = x^n$

1: $y \leftarrow 1$

2: $X \leftarrow x$

3: $N \leftarrow n$

4: **while** $N \neq 0$ **do**

5: $X \leftarrow X \times X$

6: $N \leftarrow \frac{N}{2}$

7: **end while**

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▷ example comment

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3.8.4 Tables

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L^AT_EX table generators, such as TablesGenerator.com, can help you easily create well-formatted tables. See Table 3.1 for an example.

Table 3.1 Classification performance. An asterisk (*) indicates statistically significant results ($p < 0.05$). (Font Size 12 pt)

Comparison Model	Subject-independent	
	Accuracy \pm SD	F1-score \pm SD
FBCSP-SVM	64.96 ± 12.70	65.25 ± 15.14
Deep Convnet	68.33 ± 15.33	70.20 ± 15.18
EEGNet-8,2	68.84 ± 13.87	70.39 ± 14.30
Spectral-Spatial CNN	68.27 ± 13.56	65.86 ± 17.37
MIN2Net	$72.03 \pm 14.04^*$	$72.62 \pm 14.14^*$

3.8.5 Figures

Figures can be included using the `graphicx` package. Example shown in

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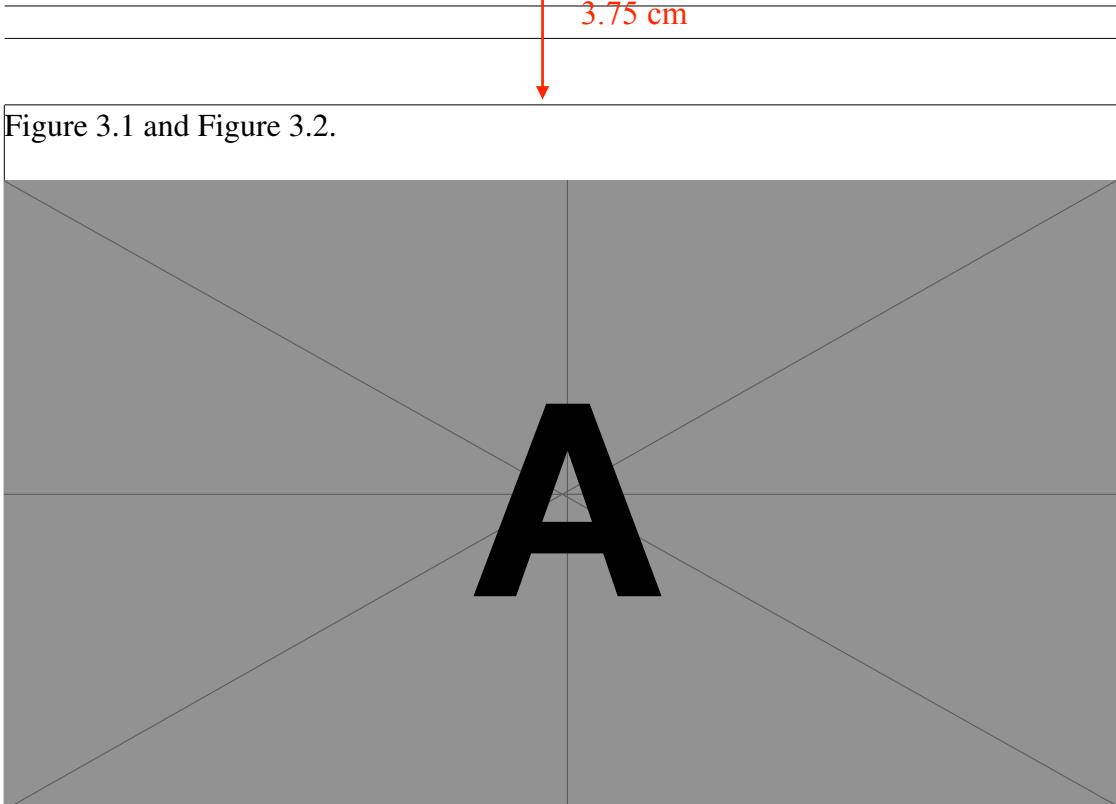


Figure 3.1 Example figure with long caption. This figure demonstrates how to include a standard image (e.g., PDF, PNG, JPG) into your document. Long captions should be aligned properly. (Font Size 12 pt)

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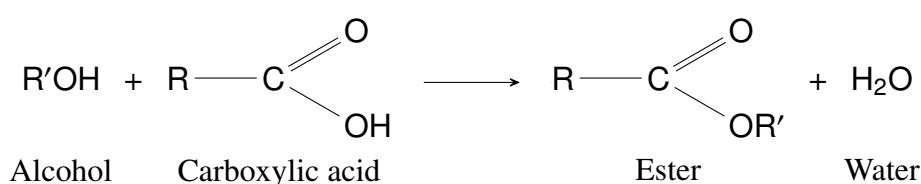


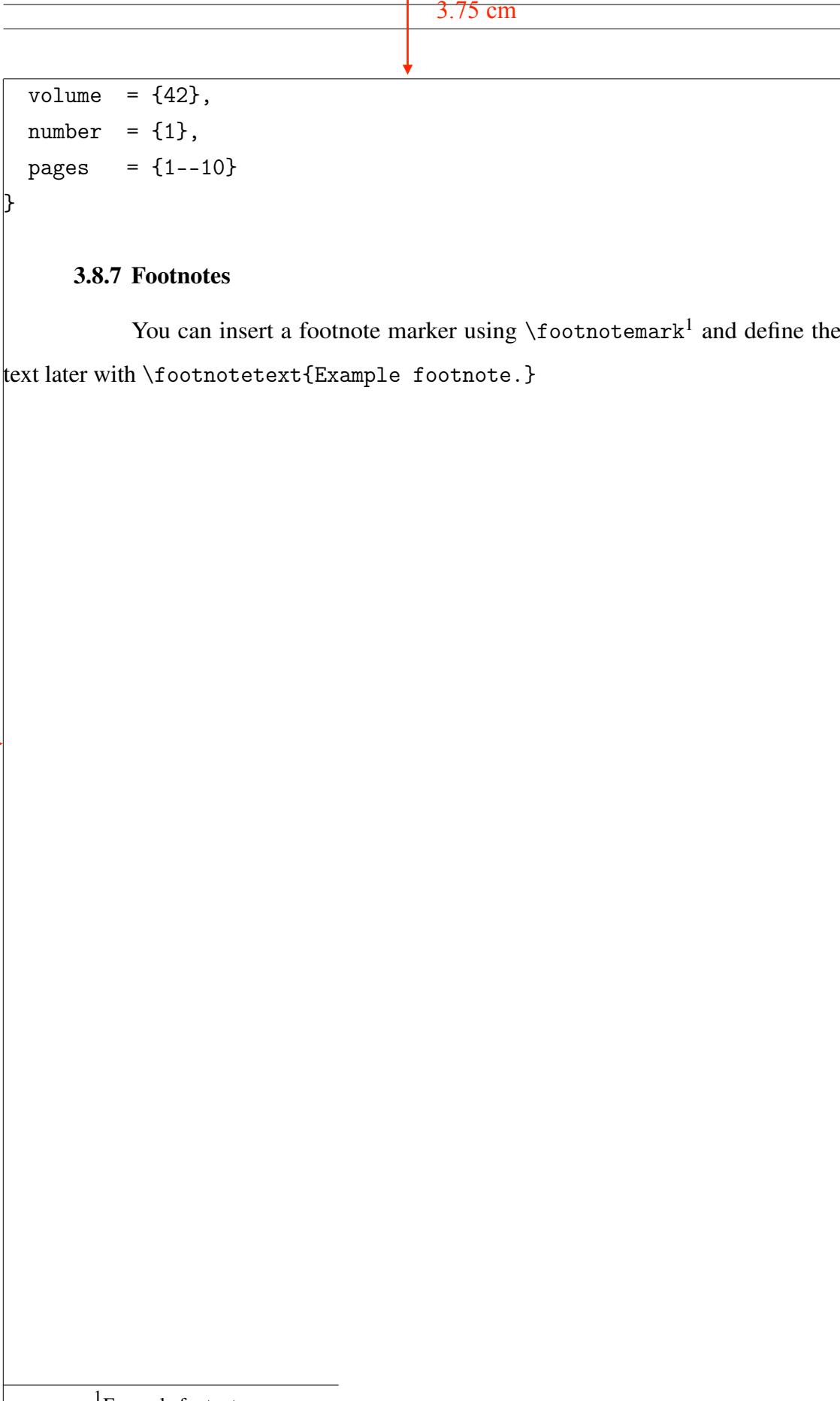
Figure 3.2 An esterification reaction illustrated using the chemfig package.

3.8.6 Citations

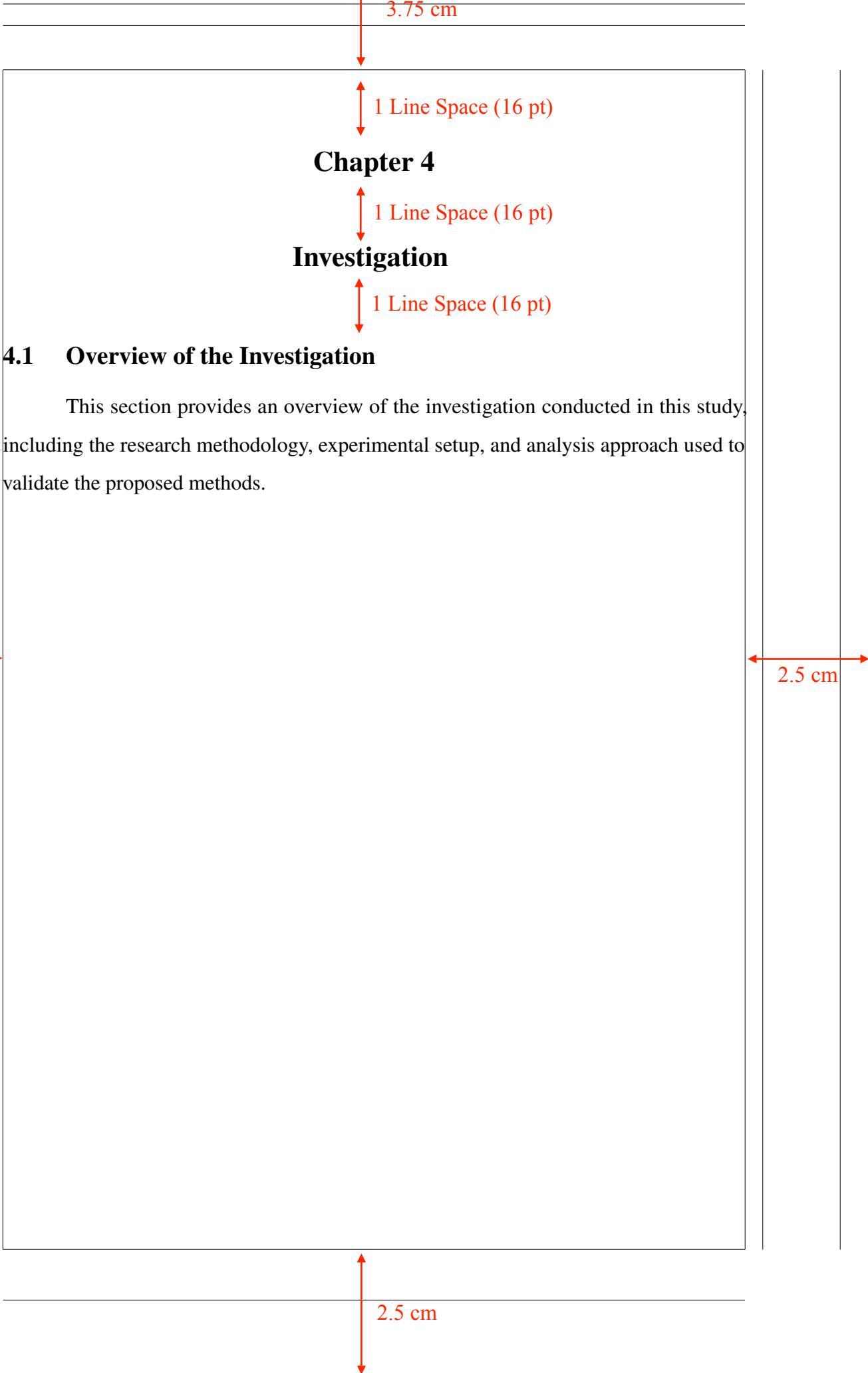
To cite references, use `\cite{}`, such as [1], or multiple sources like [2–4]. Ensure that the corresponding BibTeX entries are added to the `bibliography.bib` file before citing. Below is an example BibTeX entry:

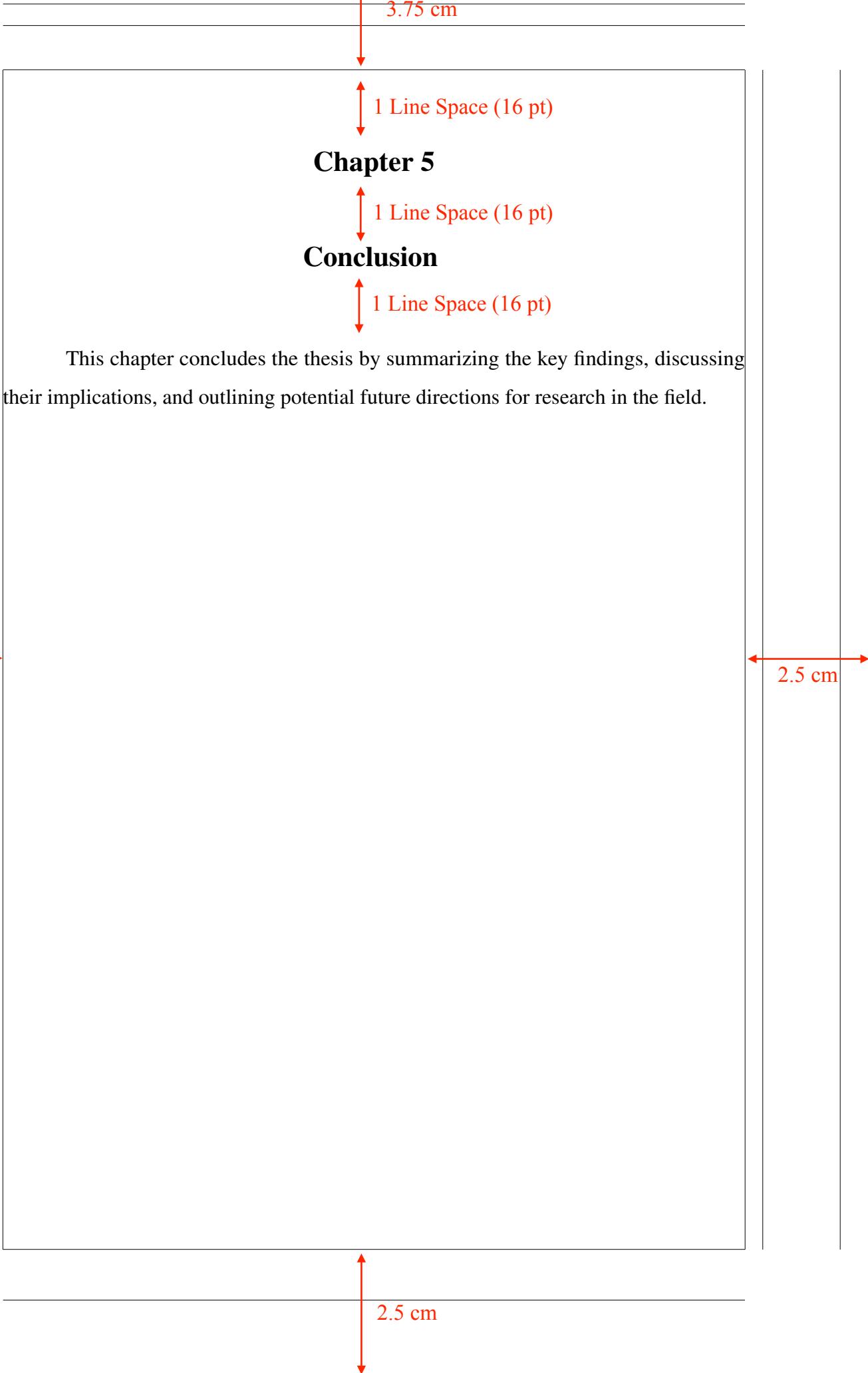
```
@ARTICLE{dummy2022example,
  author = {Doe, John and Smith, Jane and Roe, Richard},
  journal = {Journal of Example Studies},
  title = {A Dummy Title for Demonstration Purposes},
  year = {2022},
```

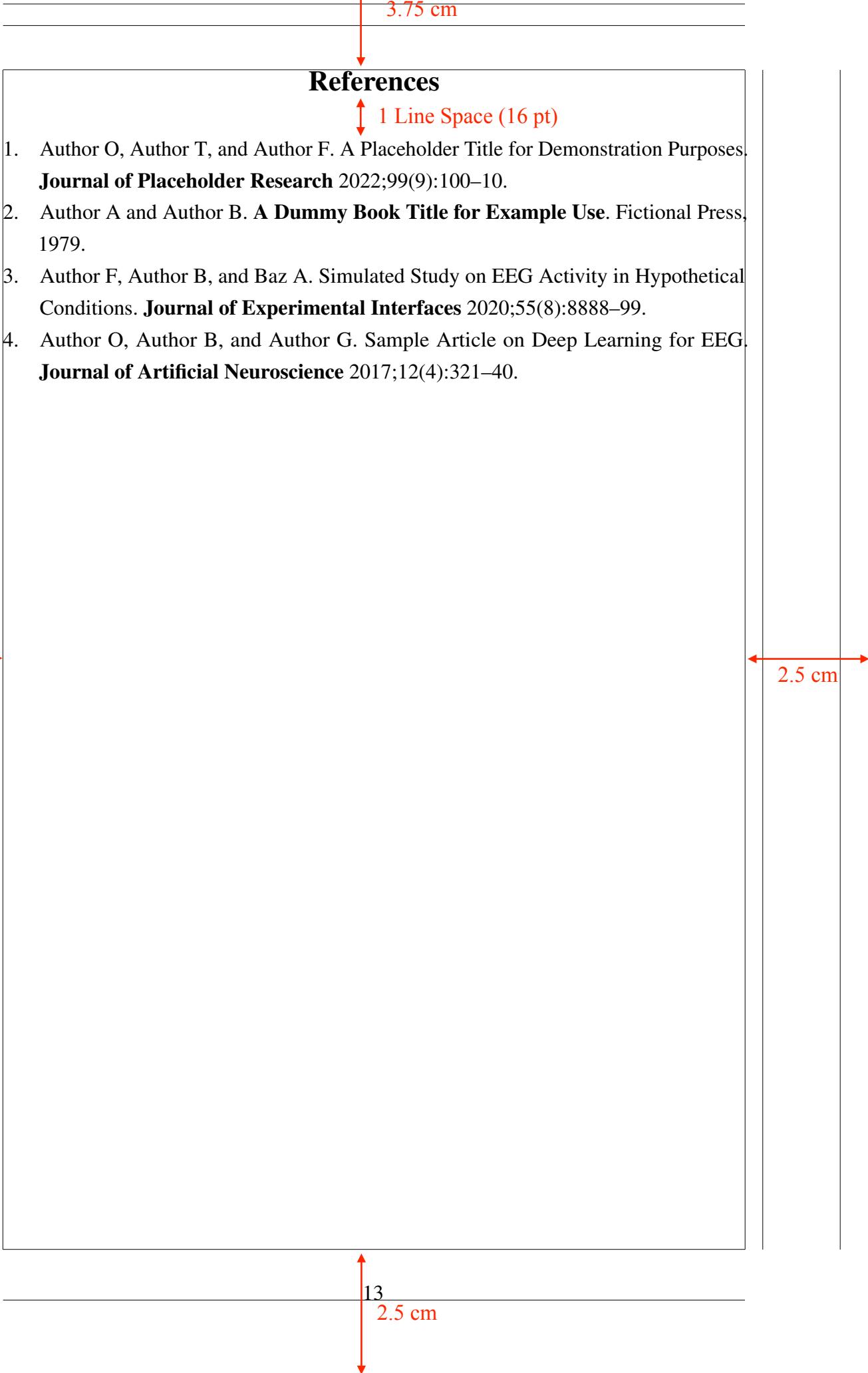
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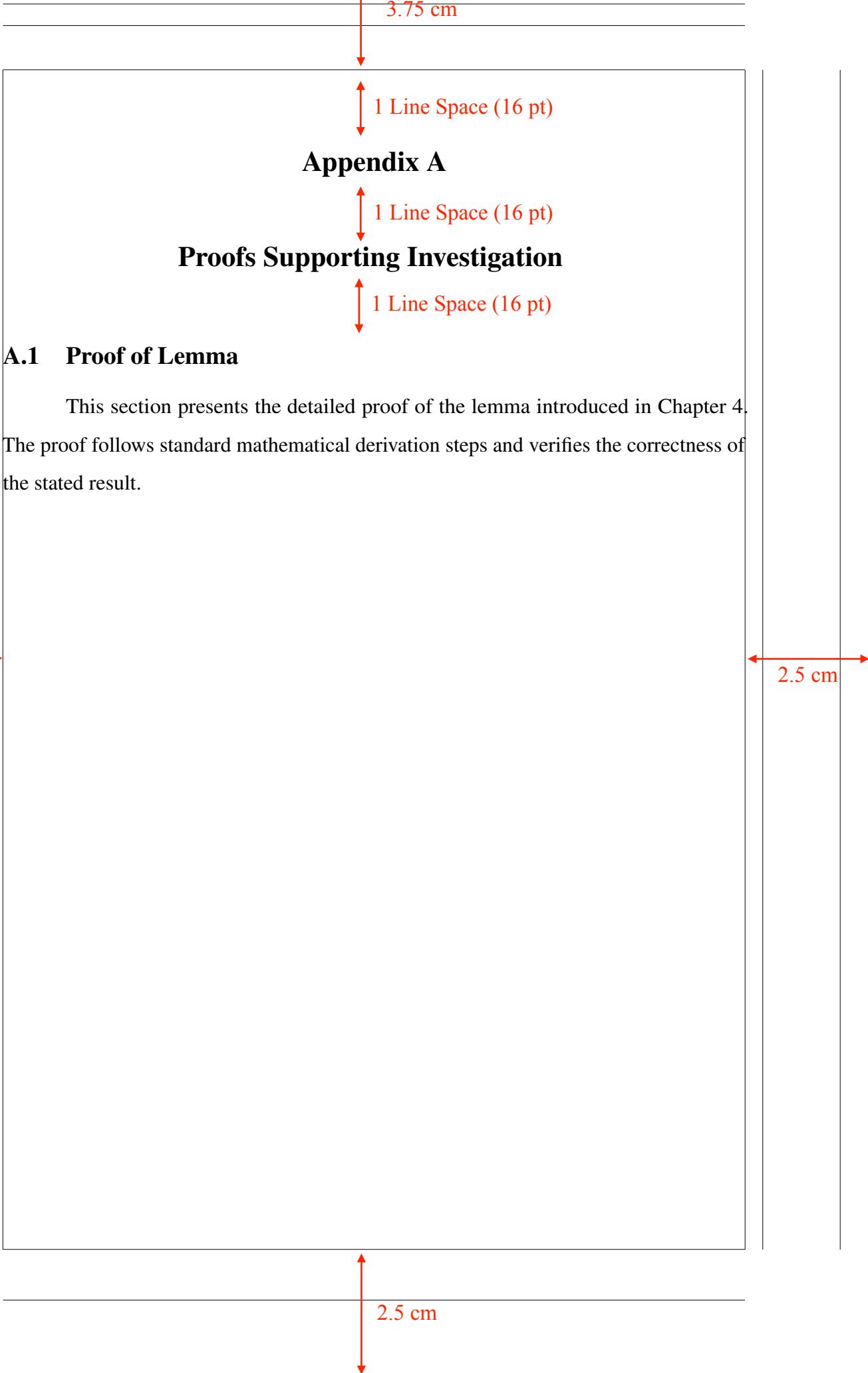


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	Author's Biography	
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Name:	AUTHOR NAME	
Date of Birth:	February 19 th , 1993	
Place of Birth:	Bangkok, Thailand	
Current Address:	555 Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900	
Education:	Bachelor of Science in Computer Science, Lorem Ipsum University, Bangkok, Thailand (2011–2014) Master of Science in Computer Science, Lorem Ipsum University, Bangkok, Thailand (2015–2017)	
Scholarship:	Recipient of the full scholarship from Vidyasirimedhi Institute of Science and Technology (VISTEC)	
Academic Publication:	Author O, Author T, and Author F. A Placeholder Title for Demonstration Purposes. Journal of Placeholder Research 2022;99(9):100–10. Author O, Author B, and Author G. Sample Article on Deep Learning for EEG. Journal of Artificial Neuroscience 2017;12(4):321–40. Author R, Author O, and Author B. A Sample Conference Paper on Face Recognition. In: Proceedings of the International Conference on Vision Research. 2015:101–10.	2.5 cm
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