

# How to write a thesis

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By

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# Outline

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- Why and when do we write a thesis?
- Skills for writing thesis
- Thesis structure
- Softwares and applications that makes writing easier!
- References and guidelines

# Why do we write a thesis?

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- A thesis is a comprehensive document about a specific research topic.
- Writing thesis To fulfill the requirement of MSc/PhD degrees.
- To prove your understanding & knowledge about your research topic.
- It needs hard and continuous work:  
reading/writing/revising/proofreading

# What do we need to write a thesis?

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- **Planning and time management skills**
- **Critical reading skills**
- **Academic writing skills**
- **Internet searching skills**
- **Resources classification**
- **Referencing skills**
- **Data analysis skills**
- **Software's skills (e.g. word, excel, origin etc.)**

# When do we start?

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- In parallel with your research project
- Do **NOT** wait until you finish experiments!
- If you start with small tasks (30 min/day or 1/2 page/day) but with continuous progression, then
  - ➔ At least you will have about 50% of your thesis ready before finishing your experiments
  - ➔ **STRESS-FREE** writing 😊

# How to do this task?

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- **Know the University's Requirements for Research Degree Theses.**  
[Press Here](#) for KSU regulations
- **Have a Clear Plan for Each Chapter**
- **Set Dates for Completing Each Section so You Can Submit the Whole on Time**
- **Get Feedback on Your Plan and Use It**

# Planning

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- Write in one side of a paper:
- the order of the sections/chapters that will make up your thesis
- the title of each section/chapter
- a note of what each section/chapter will cover
- Use applications like <https://workflowy.com> to organize each chapter and its resources
- Set a timeframe for each chapter
- It is important to get your supervisor feedback

# Usual Thesis structure

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- Title
- Abstract
- Acknowledgements
- Tables of contents, list of tables and graphs
- Introduction chapter
- Background & literature review Chapter
- Research Methodology
- Results and Discussions chapters
- Conclusion
- Appendices (if needed)
- References

# Thesis chapters: Abstract

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- The abstract is the hardest part of the thesis to write and most readers of the thesis will read it first → Plan to write it last
- The abstract conveys the most important messages regarding your project, such as: what you set out to do? How did you do it? What results were obtained?

# Thesis chapters: Abstract

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A good abstract has to:

- Be precise and honest
- Stand alone
- Use no technical jargon
- Be brief and specific
- Minimize the use of abbreviations
- Cite no references

# Thesis chapters: Introduction

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- Introduce the reader to the particular problem your project is attempting to solve.
- Most projects have multiple objectives. it is a good idea to state these in a numbered list.

# Thesis chapters: Introduction

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Generally, the introduction chapter should contain:

- Background for the work
- The importance and significance of the work
- Include brief descriptions of the development process, design, implementation, and testing approaches
- Provide a synopsis of what the other chapters contain
- By the time the reader has finished reading the Introduction s/he should have a clear understanding of the problem you set out to address and how it has been solved

# Thesis chapters: Literature Review

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- This chapter is mandatory
- It focuses on issues that are more specifically related to the work in your project.
- Describe similar work done by others in the past in the literature.
- Proof that you have done a literature search and completed a critical analysis of the relevant literature describing prior work in the field.
- Demonstrate this by writing some discussions on what others have done, what they have achieved, and limitations of their work.
- Do not copy and paste text from the literature; paraphrase the contents in your own words.

# Thesis chapters: Methodology

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Describing the materials used in your research project

Explaining how the materials were prepared

Describing the techniques that you used

Explaining how measurements were made and what calculations were performed

Explaining how the setup was calibrated and the limitation of your method

# Thesis chapters: Results and discussion

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- Use figures and tables to summarize data
- Comment on the results obtained
- Interpret what the results mean
- Identify any sources of error in your measurements
- Explain any results which are unexpected
- Define the limitations of the method

# Thesis chapters: Results and discussion

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“Readers... often look at the graphics first and many times go no further. Therefore, the reviewer should be particularly sensitive to inclusion of clear and informative graphics.”

*Henry Rapoport, Associate Editor, Journal of Organic Chemistry*

# Thesis chapters: Conclusion and Outlook

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- Summarize the problem you set out to solve, describe what you have achieved, and prospect for future work
- Refer back to the problems you encountered and how you overcame those, or found workarounds.
- the conclusion section should not contain detailed descriptions of the problems or the solutions
- Address how you have met the original objectives of the project (i.e. proposal contents)
- Discuss potential future work

# Thesis chapters: Appendices

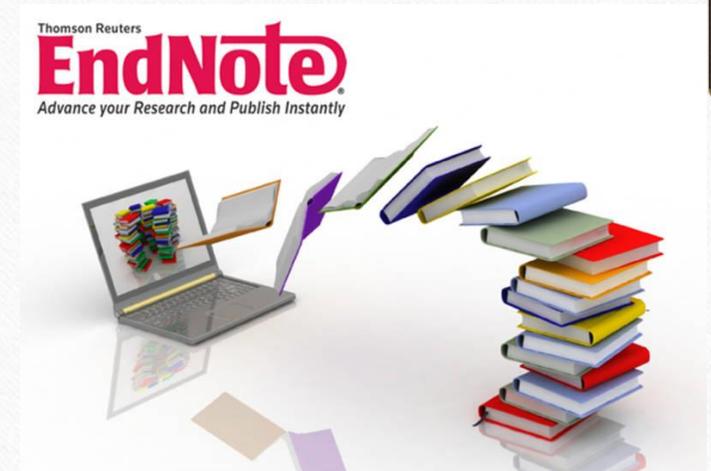
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- Use Appendix to present material that will interrupt the flow if included in the main part of the thesis.

# Thesis chapters: References

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- Use either Harvard referencing style or Vancouver Style **BUT** not **BOTH**
- Learn how to Use Endnote referencing software
- Learning Endnote will save your efforts and time



# What do we recommend?

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If you are an MSc/PhD student, we you should:

- Start planning your thesis chapters and gathering information
- Take an academic English course
- Take a course in a thesis writing
- Learn how to master Microsoft Word&Excel
- Learn how to use Endnote and start using it immediately.

# Helpful Softwares and Websites

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- Workflowy ([workflowy.com](http://workflowy.com)) for structuring your thesis and managing your resources
- Dropbox ([www.dropbox.com](http://www.dropbox.com)) for saving your chapter files (Do not rely on memory sticks)
- Paraphrasing tool: <http://paraphrasing-tool.com> (be aware of rubbish advertisements)
- Manchester University Phrase Bank: [www.phrasebank.manchester.ac.uk](http://www.phrasebank.manchester.ac.uk)

# Good references for thesis writing

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- “How To Write A Thesis (Open Up Study Skills)” by Rowena Murray (<http://www.amazon.co.uk/Write-Thesis-Open-Study-Skills/dp/0335244289>)
- “PHD: An uncommon guide to research, writing & PhD life” by James Hayton (<http://www.amazon.co.uk/PhD-uncommon-guide-research-writing/dp/0993174108>)
- “How to Write a Thesis” by Umberto Eco (<https://mitpress.mit.edu/books/how-write-thesis>) or (<http://www.amazon.co.uk/How-Write-Thesis-Umberto-Eco/dp/0262527138>)

# Helpful Websites

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- **Sheffield University Thesis Writing Resources:**  
<https://www.sheffield.ac.uk/ssid/301/tash/writing/academic/thesis>

- **Manchester University Thesis Guide:**

[http://www.humanities.manchester.ac.uk/studyskills/assessment\\_evaluation/dissertations/index.html](http://www.humanities.manchester.ac.uk/studyskills/assessment_evaluation/dissertations/index.html)

- <http://www2.le.ac.uk/departments/gradschool/training/eresources/study-guides/thesis/developing>
- **Purdue University thesis guide** <https://owl.english.purdue.edu/owl/>
- <https://uwaterloo.ca/graduate-studies/thesis/thesis-regulations>

# The most important take home message

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- **Read!**

AND

**Read!**

AND

**Read!**