

THE THESIS PROPOSAL GUIDE

Please USE the following references:

The Little, Brown Handbook by H. Ramsey Fowler
Writing with Sources, A guide for Harvard Students by Gordon Harvey
A Handbook of Biological Investigation by Ambrose and Ambrose
Line by Line by Claire K.Cook

The Do's of **writing** a proper thesis proposal:

FOCUSED HYPOTHESIS ORGANIZED AND COHERENT COMPOSITION

1. Do have a succinct testable hypothesis.
 2. Do develop your ideas.
 3. Do have supportive and opposing evidence.
 4. Do consider organization and coherence of your ideas.
 5. Do make sure your paragraphs flow one to the next logically
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THESIS PROPOSAL

The Research Problem

- ⇒ The aim of this section is to give a precise statement of your hypothesis, logical support, and context of your research.
- ⇒ This section should NOT be longer than two pages.

1. Open with a paragraph that draws the reader from his or her world into the subject.
 - ❖ Focus the reader's attention on the topic.
 - ❖ Arouse their curiosity.
2. Give general a description of the field.
 - ❖ Place your research in context.
3. Briefly walk the reader through the logic supporting your hypothesis.
 - ❖ State your hypothesis.
 - ❖ Briefly state the logical argument that supports your hypothesis.
 - ❖ This section should be *heavily cited*.
4. Briefly discuss your experimental approach.

Background

- ⇒ The aim is to show how your hypothesis relates to the research of other investigators.
- ⇒ This section should not be longer than 25 pages and heavily cited.
- ⇒ ORGANIZATION, CLARITY AND COHERENCE

Background

1. Organize the research into sections (units).
 - ❖ Consider a systematic approach according to topic, date or perspective.
2. Begin with a general discussion of your topic.
 - ❖ Discuss the major issues in your field.
 - ❖ Introduce all the components of your system.
3. 5 to 10 pages should be dedicated to your supportive argument.
 - ❖ Build up to your hypothesis with a logical argument.
 - In a detail manner critique both the supportive and opposing evidence for your hypothesis.
 - Explain the weakness and strength of the research.
 - State how each article relates to your research and hypothesis.
 - Include the most recent research.
 - ❖ Clearly state your hypothesis.
 - What is novel and interesting about your hypothesis?
 - What is the tentative answer?
4. What are the implications of your research?
5. Included figures and tables for clarity.

Research Methods

- ⇒ The aim of this section is to give a succinct and logical explanation of the research methods.
- ⇒ This section should not be longer than 2 pages.

INCLUDE TABLE: Experimental Approach

Logic	Experiment	Control & Why
1.		
2.		

1. Create a table as shown above
2. Any statistics that are under taken must be *explained* and the logic of WHY you are using this particular statistic pivotal.

Limitations

- ⇒ The aim of this section is to your understanding of the scientific limitations of your project.
- ⇒ This section should not be longer than 3 paragraphs.

PLEASE NOTE THAT YOU MUST HAND IN A RECENT REVIEW OF YOUR THESIS PROPOSAL TOPIC

IMPORTANT INFORMATION:

- The topic must **FIRST** be approved by the ALM Research Director before you begin to develop the thesis itself- Please call and make an appointment 495-1877.
- **Only 20% of the thesis work can be done as preliminary experiments**
- *DO NOT START the thesis experiments UNTIL the thesis proposal has been accepted by the ALM Thesis advisor and the director.*