

Research Proposal Writing

Chapter 4 Research Fundamental

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Outline

1 Research Proposal Writing

2 Research Proposal

Research Proposal Writing

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- Science aims to find patterns, trends, and structures in the experiment
- Good scientific writing aims to bring forward in the text
 - Structure
 - Organization of knowledge

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 - What did you do to solve the problems?

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Subject or Title	Set out the broad topic you would like to research
↓	
Aims and Objectives	What research would set out to achieve
↓	
Methodology	How you would go about researching it
↓	
Expected outcomes	What the results might be in relation to knowledge and understanding in the subject
↓	
Outline plan	How you would undertake it within the time available

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 - the **competence** and the **work-plan to complete** it
 - **Problem is significant and worthy of study**
 - **Approach is novel and likely to give results**

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- Be Specific and Accurate
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"An early identification of Arrhythmia by machine learning using wearable Electrocardiogram monitoring system"

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- **Summarize:** research questions/problems
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- Did you **explain terms** to **avoid readers' confusion?**
- Introduction may include a few sections

Introduction of Research Proposal

Introduction should include four basic components

- 1 Meaningful presentation of the study
- 2 Background of the study
- 3 Statement of the main issue of the study

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 - make summary of literature reviewed including knowledge gap

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- Is the **background** **clear enough?**
- Is the **literature review** **well organized and enough?**

Key questions to ask yourself: Have I

- identified the specific research problem I wish to investigate?
- indicated what I intend to do about this problem?
- put forth an argument as to why this problem is worthy of investigation?
- made my assumption explicit?

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- Did you refer to some **literature references** to **convince your points?**

Objectives of the Study

- Objectives should be clearly stated and specific in nature
- Avoid words “to determine”, “to find out”
- Objectives should be attainable, measurable, achievable and testable

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- Why is this study important?
- How is this study important?
- For whom is this study important?

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 - How the **combination of data and methods** will allow you to address your research problem

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- This will allow an examiner to further assess the significance and validity of your research proposal

- Timeline demonstrates to the examiner that your research can be completed within the period
- Timeline should consist of a series of goals that you will need to meet in order to complete all aspects of your thesis
 - from initial research to the final editing
 - with an expected date of completion for each step