



**SCHOOL OF PHYSICAL
SCIENCES (SPS) GUIDELINES
FOR DISSERTATIONS/THESES**

BY

SPS POSTGRADUATE COMMITTEE

The School of Physical Sciences (SPS) Expectations of its Dissertations/ Theses

- The dissertation/thesis submitted to SPS must be expressed in a satisfactory literary form consistent with the discipline concerned and should display a scholarly approach to the subject and a thorough knowledge of it.
- A critical review of previous studies related to the subject, the methods employed in conducting the study and a discussion of the implication of the results should be included in the dissertation/thesis.
- A concluding summary of the contribution of the candidate's research to Science in the chosen field or Society must also stand out.

Components of SPS Dissertation/Thesis

In the guidelines of the School of Physical Sciences (SPS), the dissertation/thesis will be presumed to comprise of two broad sections:

- the preliminary section/preamble (pages before the Introduction Chapter)
- the main body of the dissertation/thesis. (pages beginning with the Introduction Chapter to the end of the thesis)

Preliminary Section of an SPS Thesis

The preliminary section of a postgraduate dissertation/thesis comprises of :

- Title page
- DECLARATION
- DEDICATION
- ACKNOWLEDGEMENTS
- ABSTRACT
- TABLE OF CONTENTS
- LIST OF TABLES (required if tables are used)
- LIST OF FIGURES (required if figures are used)
- LISTS OF ABBREVIATIONS/ACRONYMS AND SYMBOLS (required if abbreviations/acronyms and symbols are used)

Main Body of an SPS Thesis

The main body of the thesis is sequenced in the order:

- **INTRODUCTION** (The first chapter)
- **LITERATURE REVIEW**
- *In some disciplines an additional chapter on theoretical framework may be included.*
- **METHODOLOGY OR MATERIALS AND METHODS**
(Whichever applies to your discipline)
- **RESULTS AND DISCUSSION**
- **CONCLUSIONS AND RECOMMENDATIONS** (The last chapter)
- **REFERENCES**
- **APPENDICES** (required if appendices have been included)

GUIDELINES FOR THE PRELIMINARY SECTION OF THE THESIS

- Title page
- DECLARATION
- DEDICATION
- ACKNOWLEDGEMENTS
- ABSTRACT
- TABLE OF CONTENTS
- LIST OF TABLES
- LIST OF FIGURES
- LISTS OF ABBREVIATIONS/ACRONYMS AND SYMBOLS

TITLE PAGE

The Title page of the thesis must present the following information centered in the order listed:

- the University logo on top
- the name of the University “UNIVERSITY OF NAIROBI” below the logo.
- The full title of the thesis in CAPITAL LETTERS
- The full **name** of the candidate as it would appear on the degree certificate in CAPITAL LETTERS.
- The candidate’s registration number
- A statement for the qualification for which the thesis is submitted and specifies the name of the institution to which the thesis is submitted .
- The year of submission should be at the bottom of the page.

SAMPLE MSC TITLE PAGE



UNIVERSITY OF NAIROBI

**ISOLATION AND CHARACTERIZATION OF ENZYMES
FROM FUNGI FOR BIOREMEDIATION**

BY

CANDIDATE'S NAME

I56/9000/2000

**A Thesis Submitted for Examination in Partial
Fulfillment of the Requirements for Award of the
Degree of Master of Science in Biotechnology of the
University of Nairobi**

2014

SAMPLE PHD TITLE PAGE



UNIVERSITY OF NAIROBI

**ISOLATION AND CHARACTERIZATION OF ENZYMES
FROM FUNGI FOR BIOREMEDIATION**

BY

CANDIDATE'S NAME

I80/9000/2000

**A Thesis Submitted for Examination in Fulfillment of
the Requirements for Award of the Degree of Doctor of
Philosophy in Biotechnology of the University of
Nairobi**

2014

DECLARATION

What does it serve?

The declaration serves to proclaim originality of the research as required by the University policy on plagiarism.

The declaration begins with the statement:

“I declare that this thesis is my original work and has not been submitted elsewhere for examination, award of a degree or publication. Where other people’s work, or my own work has been used, this has properly been acknowledged and referenced in accordance with the University of Nairobi’s requirements”.

DECLARATION

What does it serve?

The declaration statement is followed by the signature of the student and date of signing, full name of the candidate and the Department in the School in which the student is registered.

The declaration page also serves to secure the concurrence of your supervisors that they supported the research.

This is usually phrased on a new line as follows:

“This thesis is submitted for examination with our approval as research supervisors”.

Appended below this phrase should be the names of the supervisors and their institutional contact addresses, their signatures and date of signing.

Sample Declaration Page

I declare that this thesis is my original work and has not been submitted elsewhere for examination, award of a degree or publication. Where other people's work, or my own work has been used, this has properly been acknowledged and referenced in accordance with the University of Nairobi's requirements

Signature.....

Date.....

Candidates Name

Registration number

Department of Physics

University of Nairobi

This thesis is submitted for examination with our approval as research supervisors:

Signature

Date

Prof. Main Supervisor

.....

.....

Department of Physics

University of Nairobi

P.O box 30197-00100

Nairobi Kenya

profsupervisor@uonbi.ac.ke

Dr. Other Supervisor

.....

.....

Department of Physics

University of Nairobi

P.O box 30197-00100

Nairobi Kenya

drsupervisor@uonbi.ac.ke

DEDICATION

What is the Purpose of a Dedication?

A Dedication is a brief statement used to acknowledge those who supported you during your graduate studies.

You could dedicate the thesis to your parents, spouse, children etc.

For example

“This thesis is dedicated to my parents for their steadfast support throughout my studies”

or simply

“This thesis is dedicated to my parents”

Note, in the latter, that a reason for the dedication is not given.

This is not typically the place to recognize those who assisted you in your academic research. This is left for the acknowledgement section.

ACKNOWLEDGEMENTS

What does the Acknowledgement Serve?

In the acknowledgement, the student thanks mentors, sponsors and colleagues who supported the research leading to the thesis.

Unlike in the dedication where the reason for the dedication is optional, in the acknowledgements, it is necessary to indicate the kind of support provided by those acknowledged.

The acknowledgement should not exceed one page. You can not possible thank every creature on earth, you will certainly forget someone, possibly, a very important person.

ABSTRACT

What is in an Abstract?

This should be a concise and accurate summary of the work the candidate has undertaken.

- It should state clearly the *nature and scope of the work undertaken* and *the contribution made to the knowledge of the subject investigated*.
- It should include a brief statement of the method of investigation, an outline of the key findings of the work and a summary of any conclusions reached.

An abstract should not contain any references (citations).

The abstract should not exceed two pages long.

Do not use graphs, charts, tables, or illustrations in the abstract.

Your Abstract should leave a lasting impression

TABLE OF CONTENTS

What Should it Contain?

It should be computer generated so as to list in sequence, with page numbers, all relevant subdivisions of the thesis, including:

- the titles of chapters, sections and subsections;
- any appendices;
- the list of references
- any other functional parts of the whole thesis.

The subheadings should be indented in the Table of Contents.

SAMPLE TABLE OF CONTENTS

TABLE OF CONTENTS

ABSTRACT	i
LIST OF FIGURES	vii
CHAPTER 1: INTRODUCTION	1
1.1 HEPATITIS C VIRUS	1
1.1.1 DISCOVERY	1
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1.2 TREATMENT OF HEPATITIS C	3
1.2.1 CHEMOTHERAPY	3
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CHAPTER 2: LITERATURE REVIEW	9
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2.2 MODEL SYSTEMS OF HCV REPLICATION	11
CHAPTER 3: MATERIALS AND METHODS	17
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LISTS OF TABLES, FIGURES, ABBREVIATIONS AND SYMBOLS

What Should they Contain?

LIST OF TABLES

A numerical list of all the tables, including their titles, should be included alongside their page numbers.

LIST OF FIGURES

A numerical listing of any figures and their captions should be generated outlining what they contain.

LIST OF ABBREVIATIONS/ACRONYMS AND SYMBOLS

An extensive list of any abbreviations (shortened forms of words or phrases) and symbols (conventional signs) found in the thesis should be generated.

The abbreviations should be alphabetized in the list followed by a list of symbols.

Each of the lists must begin on a separate page.

GUIDELINES FOR THE MAIN BODY OF THE THESIS

The main body of the thesis comprises of:

- **INTRODUCTION** (First chapter)
- **LITERATURE REVIEW**
- *An additional chapter (Theoretical Framework) may be included.*
- **METHODOLOGY OR MATERIALS AND METHODS**
- **RESULTS AND DISCUSSION**
- **CONCLUSIONS AND RECOMMENDATIONS** (Last chapter)
- **REFERENCES**
- **APPENDICES**

INTRODUCTION

What is the purpose of the introduction?

- The introduction gives a detailed background on the work the candidate has undertaken, including what was known.
- Background information might be historical in nature or it might refer to previous research but should convince the reader why the topic is important.

The Introduction chapter in a thesis tends to be relatively short and is written in easy-to-read language because it is written for the general audience to gain an appreciation of what the research undertaken was about and why it matters to them.

INTRODUCTION

What is the purpose of the introduction?

- The Introduction also captures the statement of the problem, the objectives and significance of the study.
- It is important to define the scope of the study (its theme or field) in order to conduct a study that is focused. *Narrowing the scope of the study lets you clarify the problem and study it at greater depth, whereas very broad research questions only allow a superficial analysis of the problem.*
- A good introduction should contain some current references to show that the candidate is conversant with the latest information regarding the topic investigated.

STATEMENT OF THE PROBLEM

The Purpose of the Statement of the Problem

Statement of the Problem is a description of a difficulty that needs to be solved or at least researched to see whether a solution can be found.

- The statement of the problem thus clearly articulates the nature or severity of the problem addressed in the research.
- The ultimate goal of the statement of the problem is to transform a generalized problem into a targeted, well-defined problem that can be resolved through focused research and careful decision-making.

OBJECTIVES

General and Specific Objectives

Objectives outline the goals of the study.

The research objectives are usually divided into:

- i. General objective or overall objective
 - ii. Specific objectives
- The general objective defines the potential contribution of the research in a bigger context (a goal that the project hopes to achieve).
 - The specific objective is a specific result that the project aims to achieve within the timeframe of the research.
 - The candidates must write the overall objective as a paragraph or a sentence of its own, then the specific objectives follow as an itemized list.

JUSTIFICATION AND SIGNIFICANCE OF THE STUDY

What is covered?

- Justification (rationale) deals with reasons that make the problem investigated a concern to a scientific community or society in general. It could be that the problem had not been adequately investigated by previous researchers and therefore required revisiting to fill any missing gaps in the knowledge about the problem
- Significance (importance) is mainly concerned with reasons why the candidate thinks the results of the research are useful to science, society or community in which the research was conducted. One among such reasons may be that the candidate's results contribute extra knowledge in the subject area of research and could either spur future research, serve as a framework for policy formulation or basis for implementing development.

LITERATURE REVIEW

An Overview

- The role of the literature review is to bring out the extent to which the problem addressed has been solved by other researchers or show what is already known about the research topic as a whole.
- It also outlines the key ideas and theories that help to understand this and clearly establishes where the knowledge gaps are in the intended area of research.
- Although, the literature review is usually written for the expert reader in the discipline, all the terminologies that need to be explained should be addressed in sufficient detail in the literature review.
- It is important that the literature review be exhaustive, up-to-date and cover a wide survey of the knowledge accumulated in the subject area by previous researchers up to the time of writing the thesis.

THEORETICAL FRAMEWORK

What Does it Cover?

- *This chapter is optional(Physics).*
- It may be needed in those theses where the theory underlying the methods employed in a study is not widely established. The candidate may expound on the theory in justifying the choice of methods used in the study.
- If present it would immediately precede the chapter on materials and methods

MATERIALS AND METHODS

or METHODOLOGY

- Materials and Methods gives an account of how the research was carried out by clearly specifying the procedures that were followed in meeting the objectives of the research.
- All the data, materials and their sources, instruments and software that were used by the candidate should be included in this chapter.
- The methods should be clear and detailed enough for another experienced person to repeat the research and reproduce the results.
- In case of a field study, detailed maps of the study area and the sampling points should be specified.

RESULTS AND DISCUSSION

What Does it Cover?

- The Results and Discussion presents the results in a logical manner and establishes their significance.
- Whereas Results can take the form of data (tables, figures etc), models, formulas, etc, the Discussion focuses on the important findings. It tells the reader what your findings might mean; how valuable they are and why.
- The discussion also deliberates on how the objectives have been demonstrated by the new research findings and then shows how the specific field's knowledge has been changed by the addition of this new finding.
- In the discussion, you may find results from other publications bearing a relationship to your findings. Most often, your result either **agrees with** (corroborates), **extends**, **refines**, or **conflicts** with previous findings.

CONCLUSIONS AND RECOMMENDATIONS

What Does it Cover?

- Conclusions are the main discoveries of a study as logically deduced from the results and should be matched with the objectives of the study.
- Recommendations are a logical extension of the conclusions and include suggestions for future research.
- In recommending directions for future study, you should think beyond using better ways of addressing the same research questions by identifying the other interesting questions that should be addressed on the topic.
- Where applicable, recommendations should guide policy formulation and implementation for the benefit of Society.

REFERENCES

What is the Accepted Format for Citation?

References relate to all the sources of information quoted in the text of the thesis.

List all the references you made throughout the thesis making sure that you comply with the referencing style of the School of Physical Sciences.

Note

- Reference list must include all work cited in the text
- All references should be relevant and up-to-date
- All references listed must be cited in the text
- List references in alphabetical order

REFERENCES

What is the accepted format for citation in the text?

One author:

The references are placed in *parentheses* in the main body of the thesis as: (Surname of author, year of publication).

In text citation:

The factors that impede research have been identified (Derese, 2013).

Or

Derese (2013) identified the factors that impede research.

Reference

Derese, S. (2013) The Art of Research Excellence. *Innate Intelligence* **102**, 21-38.

REFERENCES

What is the accepted format for citation in the text?

Two authors:

The references are placed in *parentheses* in the main body of the thesis as: (Surname of first author and Surname of Second Author, Year of publication).

In text citation:

The factors that impede research have been identified (Ndakala and Derese, 2013).

or

Ndakala and Derese (2013) identified the factors that impede research.

Reference

Ndakala, A. J. and Derese, S. (2013) The Art of Research Excellence. *Innate Intelligence* **102**, 21-38.

REFERENCES

What is the accepted format for citation in the *Three or More authors: text?*

The references are placed in *parentheses* in the main body of the thesis as: (Surname of first author *et al.*, Year of publication).

In text citation:

The factors that impede research have been identified (Onyatta *et al.*, 2014).

or

Onyatta *et al.* (2014) identified the factors that impede research.

Reference

Onyatta, J., Ndakala, A. and Opijah, F. (2014) The Art of Research Excellence. *Innate Intelligence* **102**, 21-38.

REFERENCES

What is the accepted format in the References

Journal article:

- Author(s)
- (Year of publication)
- Title of publication
- *Name of Journal (Should be italicized)*
- **Journal volume (should be bolded)**
- Journal pages

Example:

Dereese, S. and Ndakala, A. J. (2013) The Art of Research Excellence. *Innate Intelligence* **102**, 21-38.

REFERENCES

What is the accepted format in the References Book:

- Author(s)
- (Year)
- *Title of Book (Should be italicized)*
- Name of Publisher
- City
- Page ranges

Example:

Mureramanzi, S. and Wanjohi, J. (2013) *Research Methods*. University of Nairobi Press, Nairobi, Kenya, 121-153

Format for citation in the References

Chapter in a Book:

- Author(s) of Chapter
- (Year of Publication)
- Title of Chapter
- Editor(s) of Book
- *Title of Book (Should be italicized)*
- Name of Publisher
- City
- Pages

Example:

Ndakala, A. and Kuria, Z. (2014) Thesis Writing. In: Opijah, F and Mureramanzi, S. Eds. *The Chronicles of Research Science*, University of Nairobi Press, Nairobi, 301-303.

APPENDICES

When are they necessary?

- Appendices are helpful if the detailed description of certain material is inappropriate in the body of the text or is distracting because of the length or level of detail.
- Appendices should be included only if they help readers to understand, evaluate, or replicate the study.