

REPUBLIC OF CAMEROON
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UNIVERSITY OF BUEA

HIGHER TECHNICAL TEACHERS'
TRAINING COLLEGE (HTTTC)

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REPUBLIQUE DU CAMEROUN
Paix – Travail – Patrie

UNIVERSITE DE BUEA

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A GUIDE/TEMPLATE FOR WRITING THE DIPET II THESIS **FOR H.T.T.T.C. KUMBA**

A) Specifications on thesis

1) Paper size: A4 Portrait.

- a. Top margin: 2.5 cm
- b. Bottom margin: 2.5 cm
- c. Left margin: 3.7 cm Because of allowance for binding)
- d. Right margin: 2.5 cm.

2) Formatting text:

- a. Paper size: A4 (21 x 29.7 cm)
- b. Font type: Times New Roman
- c. Font size: 12
- d. Line spacing: 2
- e. Alignment: Justified

3) Cover page colour:

- a. Departments to specify e.g.
-Agriculture = Green

4) Binding:

Use spiral binding, protected by a sheet of transparent paper, and ends with a blank card board paper for examination copies; permanent binding should be done for all second cycle projects.

5) Numberings in work

Use numberings that use a maximum of the second subheading in the following sample:

Heading: 1,

First subheading: 1.1

Second Subheading: 1.1.1

6) Number of pages: 60 to 85 pages for second cycle dissertations

7) Students should not put any personal information as headers or footers

8) Bullets should use the following format:

- Bullet
- Bullet

B) Structure of Thesis

Title page	i
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List of abbreviations/Notations.....	ix
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CHAPTER ONE: INTRODUCTION1

- Background and context of the study
- Statement of problem
- Research question (s)
- Research hypothesis (if any used)
- Objectives of the study
- Significance of the study
- Outline of the dissertation/thesis
- Definition of terms

CHAPTER TWO: LITERATURE REVIEW

- Published/unpublished material relevant to the themes of the study.
Published works are preferred. Although unpublished material is sometimes used, at higher levels and for scientific publications, unpublished material is not recommended, and is called ‘grey’ literature.

CHAPTER THREE: MATERIALS AND METHODS

- Background of study area
- Description of the study subjects (plants, animals, hotels, touristic sites, or human populations etc. central to the study)
- Experimental design/layout

- Sample and sampling techniques (often synonymous with data collection methods)
- Data analysis

CHAPTER FOUR: RESULTS

- Here results are presented 'dry' ie without any explanations
- Results typically follow the same headings used under data collection, that is, for each variable, results should be presented

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

- Here the key results are discussed
- Discussion typically follows the following trend: what were the results, why are the results the way they are, and how do they compare with findings of other authors
- Conclusions are drawn relative to the specific objectives; if there are three specific objectives, we expect three main conclusions
- Recommendations (made based on the findings of the research)

Compulsory for PhD Theses and optional for MSc/M.Tech Dissertations are the following sections:

- Contributions of the research to science/knowledge
- Contributions of the research to society

- Limitations of the research (This is also expected for MSc./M.Tech dissertations)
- Suggestions for further studies

References / Bibliography

C) Details of some elements in the structure of thesis

Title Page

Title (including subtitle), author, institution, department, date of delivery, research mentor(s) and advisor, their institutions and email addresses. See template on next page.

-In the University of Buea, we do not use the letterhead and logo on theses and dissertations. There is a Vice Chancellor's decision to this effect.

-Always include your previous qualifications after the matricule number.

-See template below

UNIVERSITY OF BUEA**HTTTC KUMBA****DEPARTMENT OF**

Topic of dissertation/thesis (e.g.) Hotel client responses to different promotional strategies

By**Name of Student****HTxxxxxx****Previous qualification (s)**

A thesis/dissertation submitted to the Department of of the Higher Technical Teachers' Training College Kumba of the University of Buea, in partial fulfillment of the requirements for the award of the M.Tech/PhD degree in ... (Name of programme)

Name of Supervisor
Or Supervisor (s)

Month and year of submission (e.g. June 2019)

Dedication

This section contains person or group of persons in whose honour the thesis is written. (This is optional and can be left out)

Certification

This section comes in two formats. The first format used before defense contains certification by supervisor and Head of department that the work in the thesis was effectively carried out by student and can therefore be presented/defended. The second contains a statement that the thesis has been examined and approved by a panel (which is identified by their positions, titles and roles), and a final statement that the examined thesis has been accepted by the college. See samples of the two versions below.

UNIVERSITY OF BUEA**HTTTC KUMBA****DEPARTMENT OF AGRICULTURE****CERTIFICATION (Before defense)**

The thesis of entitled “**Here you write the complete title of your thesis/dissertation**” submitted to the Department of xxxxxxxx of the Higher Technical Teachers’ Training College Kumba of the University of University of Buea in partial fulfilment of the requirements for the award of the Masters of Technology (M.Tech) (of Doctor of Philosophy (Ph.D)) Degree in ...(Name of Programme), is the original work of xxxx xxxx xxxx (HTxxPxxx) under the supervision of:

Dr. Foadieng Emmanuel
Supervisor

Date

Dr. Agbortoko Ayuknkem
Co-supervisor (if any)

Date

UNIVERSITY OF BUEA

HTTTC KUMBA

DEPARTMENT OF AGRICULTURE

CERTIFICATION (After successful defense)

The thesis of xxxx xxxx xxxx (HTxxPxxx) entitled “**Here you write the complete title of your thesis/dissertation**” submitted to the Department of xxxxxxxx of the Higher Technical Teachers’ Training College Kumba of the University of University of Buea in partial fulfilment of the requirements for the award of the Masters of Technology (M.Tech) (of Doctor of Philosophy (Ph.D)) Degree in ...(Name of Programme) has been examined and approved by the examination panel composed of:

- Defang Henry Fualefac (Ph.D), Chairperson (Associate Professor of Animal Nutrition)
- Lyonga N. Agnes (Ph.D), Examiner (Lecturer of Science of Education)
- Mfombep Priscilla Mebong (Ph.D), Supervisor (Lecturer of Botany)

Defang Henry Fualefac (Ph.D)
(Head of Department)

Mfombep Priscilla Mebong
(Supervisor)

This thesis has been accepted by the Faculty of Science.

Date: _____

Prof. Akume Daniel Akume
(Director)

Acknowledgments

Advisor(s) and anyone who helped you:

1. technically (including materials, supplies)
2. intellectually (assistance, advice)
3. financially (for example, departmental support, travel grants)
4. Some hierarchy should be respected in the presentation of acknowledgements

Abstract

- A good abstract explains in one line why the paper is important. It then goes on to give a summary of your major results, preferably couched in numbers with error limits. The final sentences explain the major implications of your work. A good abstract is concise, readable, and quantitative.
- Length should be ~ 1-2 paragraphs, approx. 400 words.
- Abstracts generally do not have citations.
- Information in title should not be repeated.
- Be explicit.
- Use numbers where appropriate.
- Add a line of key words (on which the work is centered) on a new line at the end of the abstract
- Answers to these questions should be found in the abstract:
 1. What did you do?
 2. Why did you do it? What question were you trying to answer?

3. How did you do it? State methods.
4. What did you learn? State major results.
5. Why does it matter? Point out at least one significant implication.

Table of Contents

- list all headings and subheadings with page numbers
- indent subheadings
- See example at the beginning of this document

List of Figures

List page numbers of all figures.

The list should include a short title for each figure but not the whole caption.

List of Tables

List page numbers of all tables.

The list should include a short title for each table but not the whole caption.

Introduction

Background and Context: Give the background to your project and context of what you have done. The background is usually written in inverted pyramid form, that is, starting with more general issues around the topic of interest and gradually narrowing down to specific issues investigated. It should touch the issues that

constitute the problem. By the end of the background, it should be clear already, what the problem is that the research aims to address.

Problem Statement: This is now a more concise and direct statement of the problem that the research seeks to address. It could be as brief as a single paragraph or as long as a couple of pages as long as it focusses on stating the problem. It is rare to see good problem statements longer than two pages.

Objectives: Define the objectives of your research.

Outline of dissertation/thesis: Briefly overview the contents of what follows in the dissertation.

NB:

A good introduction can't be written until what the body of the thesis says is known. Consider writing the introductory section(s) after you have completed the rest of the thesis, rather than before.

Be sure to include a hook at the beginning of the introduction. This is a statement of something sufficiently interesting to motivate your reader to read the rest of the paper, it is an important/interesting scientific problem that your paper either solves or addresses. You should draw the reader in and make them want to read the rest of the thesis.

The next paragraphs in the introduction should cite previous research in this area. It should cite those who had the idea or ideas first, and should also cite those who have done the most recent and relevant work. You should then go on to explain why more

work was necessary (your work, of course.)

What else belongs in the introductory section(s) of your paper?

1. A statement of the goal of the paper: why the study was undertaken, or why the paper was written. Do not repeat the abstract.
2. Sufficient background information to allow the reader to understand the context and significance of the question you are trying to address.
3. Proper acknowledgement of the previous work on which you are building. Sufficient references such that a reader could, by going to the library, achieve a sophisticated understanding of the context and significance of the question.
4. The introduction should be focused on the thesis question(s). All cited work should be directly relevant to the goals of the thesis. This is not a place to summarize everything you have ever read on a subject.
5. Explain the scope of your work, what will and will not be included.
6. A verbal "road map" or verbal "table of contents" guiding the reader to what lies ahead.
7. Is it obvious where introductory material ("old stuff") ends and your contribution ("new stuff") begins?

Remember that this is not a review paper. We are looking for original work and interpretation/analysis by you. Break up the introduction section into logical segments by using subheads.

Literature review

Here, all the books, articles, dissertations, and every other written and published material related to the research topic are presented bringing out the results, contributions and limitations of each. These results are used to situate and bring out the relevance of the present work in the thesis.

Materials and Methods

What belongs in the "research methods" section of a thesis?

1. Information to allow the reader to assess the believability of your results.
2. Information needed by another researcher to replicate your experiment.
3. Description of your materials, procedure, theory.
4. Calculations, technique, procedure, equipment, and calibration plots.
5. Limitations, assumptions, and range of validity.
6. Description of your analytical methods, including reference to any specialized statistical software.

The methods section should be answering the following questions and caveats:

1. Could one accurately replicate the study (for example, all of the optional and adjustable parameters on any sensors or instruments that were used to acquire the data)?
2. Could another researcher accurately find and reoccupy the sampling stations

or track lines?

3. Is there enough information provided about any instruments used so that a functionally equivalent instrument could be used to repeat the experiment?
4. If the data are in the public domain, could another researcher lay his or her hands on the identical data set?
5. Could one replicate any laboratory analyses that were used?
6. Could one replicate any statistical analyses?
7. Could another researcher approximately replicate the key algorithms of any computer software?

Citations in this section should be limited to data sources and references of where to find more complete descriptions of procedures.

Do not include descriptions of results.

Results

- The results are actual statements of observations, including statistics, tables and graphs.
- Indicate information on range of variation.
- Mention negative results as well as positive. Do not interpret results - save that for the discussion.
- Lay out the case as for a jury. Present sufficient details so that others can draw their own inferences and construct their own explanations.
- Use S.I. units (m, s, kg, W, etc.) throughout the thesis.
- Break up your results into logical segments by using subheadings

- Key results should be stated in clear sentences at the beginning of paragraphs. It is far better to say "X had significant positive relationship with Y (linear regression $p < 0.01$, $r^2 = 0.79$)" then to start with a less informative like "There is a significant relationship between X and Y". Describe the nature of the findings; do not just tell the reader whether or not they are significant.

Quarantine your observations from your interpretations. The writer must make it crystal clear to the reader which statements are observation and which are interpretation. In most circumstances, this is best accomplished by physically separating statements about new observations from statements about the meaning or significance of those observations. Alternatively, this goal can be accomplished by careful use of phrases such as "I infer ...". For example, vast bodies of geological literature became obsolete with the advent of plate tectonics; the papers that survived are those in which observations were presented in stand-alone fashion, unmuddled by whatever ideas the author might have had about the processes that caused the observed phenomena.

How do you do this?

1. Physical separation into different sections or paragraphs.
2. Don't overlay interpretation on top of data in figures.
3. Careful use of phrases such as "We infer that ".
4. Don't worry if "results" seem short.

Why?

1. Easier for your reader to absorb, frequent shifts of mental mode not required.
2. Ensures that your work will endure in spite of shifting paradigms.

Discussion

Start with a few sentences that summarize the most important results. The discussion section should be a brief essay in itself, answering the following questions and caveats:

1. What are the major patterns in the observations? (Refer to spatial and temporal variations.)
2. What are the relationships, trends and generalizations among the results?
3. What are the exceptions to these patterns or generalizations?
4. What are the likely causes (mechanisms) underlying these patterns resulting predictions?
5. Is there agreement or disagreement with previous work?
6. Interpret results in terms of background laid out in the introduction - what is the relationship of the present results to the original question?
7. What is the implication of the present results for other unanswered questions in earth sciences, ecology, environmental policy, etc....?
8. Multiple hypotheses: There are usually several possible explanations for results. Be careful to consider all of these rather than simply pushing your favorite one. If you can eliminate all but one, that is great, but often that is

not possible with the data in hand. In that case you should give even treatment to the remaining possibilities, and try to indicate ways in which future work may lead to their discrimination.

9. Avoid bandwagons: A special case of the above. Avoid jumping a currently fashionable point of view unless your results really do strongly support them.
10. What are the things we now know or understand that we didn't know or understand before the present work?
11. Include the evidence or line of reasoning supporting each interpretation.
12. What is the significance of the present results: why should we care?

This section should be rich in references to similar work and background needed to interpret results. However, interpretation/discussion section(s) are often too long and verbose. Is there material that does not contribute to one of the elements listed above? If so, this may be material that you will want to consider deleting or moving. Break up the section into logical segments by using subheads.

Conclusions

- What is the strongest and most important statement that you can make from your observations?
- If you met the reader at a meeting six months from now, what do you want them to remember about your paper?
- Refer back to problem posed, and describe the conclusions that you reached from carrying out this investigation, summarize new observations, new

interpretations, and new insights that have resulted from the present work.

- Include the broader implications of your results.
- Do not repeat word for word the abstract, introduction or discussion.

The conclusion should contain:

1- Summary

Summarise what you have achieved. This should be done in consideration of the initial specific objectives.

2- Evaluation

Stand back and evaluate what you have achieved and how well you have met the objectives. Evaluate your achievements against your objectives in section of scope and objectives. Demonstrate that you have tackled the project in a professional manner.

3- Future Work

Explain any limitations in your results and how things might be improved. Discuss how your work might be developed further. Reflect on your results in isolation and in relation to what others have achieved in the same field. This self-analysis is particularly important. You should give a critical evaluation of what went well, and what might be improved.

Recommendations

- Include when appropriate (most of the time)
- Remedial action to solve the problem.
- Further research to fill in gaps in our understanding.
- Directions for future investigations on this or related topics.

References

- cite all ideas, concepts, text, data that are not your own
- if you make a statement, back it up with your own data or a reference
- all references cited in the text must be listed
- cite single-author references by the surname of the author (followed by date of the publication in parenthesis)
 - ... according to Hays (1994)
 - ... population growth is one of the greatest environmental concerns facing future generations (Hays, 1994).
- cite double-author references by the surnames of both authors (followed by date of the publication in parenthesis)
 - e.g. Simpson and Hays (1994)
- cite more than double-author references by the surname of the first author followed by et al. and then the date of the publication
 - e.g. Pfirman, Simpson and Hays would be:
 - Pfirman et al. (1994)
- do not use footnotes

- list all references cited in the text in alphabetical order using the following format for different types of material:
 - Hunt, S. (1966) Carbohydrate and amino acid composition of the egg capsules of the whelk. *Nature*, 210, 436-437.
 - National Oceanic and Atmospheric Administration (1997) Commonly asked questions about ozone. <http://www.noaa.gov/public-affairs/grounders/ozo1.html>, 9/27/97.
 - Pfirman, S.L., M. Stute, H.J. Simpson, and J. Hays (1996) Undergraduate research at Barnard and Columbia, *Journal of Research*, 11, 213-214.
 - Pechenik, J.A. (1987) A short guide to writing about biology. Harper Collins Publishers, New York, 194pp.
 - Pitelka, D.R., and F.M. Child (1964) Review of ciliary structure and function. In: *Biochemistry and Physiology of Protozoa*, Vol. 3 (S.H. Hutner, editor), Academic Press, New York, 131-198.
 - Sambrotto, R. (1997) lecture notes, Environmental Data Analysis, Barnard College, Oct 2, 1997.
 - Stute, M., J.F. Clark, P. Schlosser, W.S. Broecker, and G. Bonani (1995) A high altitude continental paleotemperature record derived from noble gases dissolved in groundwater from the San Juan Basin, New Mexico. *Quat. Res.*, 43, 209-220.
 - New York Times (1/15/00) PCBs in the Hudson still an issue, A2.
- it is acceptable to put the initials of the individual authors behind their last names, e.g. Pfirman, S.L., Stute, M., Simpson, H.J., and Hays, J (1996)

Undergraduate research at ...