Guidelines for Synopsis and Thesis Preparation

(Examinations branch)

National Defence University
Islamabad- Pakistan
Foreword:
The research work at universities helps and guides the students for the preparation of uniform thesis for the award of respective degree. The intention of these guidelines is to provide a technical framework for the preparation of theses. If the thesis is not presented in the required format, it will not be accepted, nor will the degree be conferred until all the required specifications have been met. Further, the thesis will not be microfilmed, limiting the availability of the research to other scholars within the academic community and beyond.

For information on policy and procedures governing the defence of the thesis, both at the master's and doctoral level, please consult the Examination branch NDU or the departmental supervisor.

In writing a thesis students must conform to accepted standards in organizing and presenting their data clearly and logically, and in applying accepted practices of manuscript form consistently. Strict adherence to the standards which follow ensures:

- reader accessibility,
- the ability to reproduce the thesis on request, and
- the durability of the archived copy of the thesis.

Reader accessibility requires that the thesis be carefully prepared. Only good quality theses will be reproduced and microfilmed. Durability depends on quality paper and correct binding of the thesis.

Close attention by the student to these criteria will expedite the processing and availability of theses.
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THESIS WRITING OVERVIEW
CHAPTER 1

THESIS WRITING OVERVIEW

1. Definition of a Thesis
Thesis in this guidebook refers to a documented report of the process followed by and the results of original research conducted by the students to fulfill the requirements for a Post-Graduate degree. The thesis should be presented in a manner that will reflect credit on the student, the faculty, and the University.

2. Organization of the Thesis
A thesis is made up of three main parts namely preliminary pages, text and references.

3. Declaration
Supervisor’s Declaration
A thesis is to be submitted for the purpose of examination. It must obtain prior declaration by the supervisor on the standard and quality of the thesis.

4. Declaration Page
Student’s Declaration
This page should contain declaration by the student on originality of the thesis. The declaration should be signed.

5. Dedication Page (optional)
The dedication must be brief, not more than one paragraph, and must not contain any number, chart or photograph.

6. Acknowledgement (optional)
The student may acknowledge the assistance of various individuals or organizations in successfully producing the thesis. This should be written in one page.
7. **Abstracts**

The abstract should be brief, written in one paragraph and not exceed 300 words. An abstract is different from synopsis or summary of a thesis. It should states the field of study, problem definition, methodology adopted, research process, results obtained and conclusion of the research. The abstract can be written using single or one and a half spacing.

8. **Introduction**

Set the scene and problem statement. Introduce structure of thesis.

9. **Background**

Demonstrate wider appreciation (context). Provide motivation.

10. **Related Work**

Survey and critical assessment. Relation to own work.

11-13. **Analysis, design, implementation and interpretation of results**

14. **Critical assessment of own work**

State hypothesis, and demonstrate precision, thoroughness, contribution, and comparison with closest rival.

15. **Table of Contents Page**

The Table of Contents page must start on a new page. It should list all sections, chapters and sub-headings. The titles must be written using the same words as those written in the text.

16. **List of Tables**

This page should list all the tables found in the thesis. The page number of the table must also be included. The table numbers should be arranged according to the chapters.

17. **List of Figures**

Diagrams, photographs, drawings, graphs, charts and maps are included as figures. The list should be written similar as the List of Tables.

18. **List of Symbols/Abbreviations/Notations/Terminology**

All symbols or abbreviations or notations or terminology found in the text should be listed on this page. They are listed in the following order:

- Roman letters - alphabetical order
- Greek letters - alphabetical order
- Superscripts - alphabetical order
19. List of Appendices

All appendices should be listed on this page.

20. Text

A thesis must be divided into chapters. A title must be given and it should reflect its content. A new chapter must begin on a new page. A chapter must be divided into sections. These sections must be given appropriate titles and numbered. Texts must be written in paragraphs. Long paragraphs should be avoided. Each paragraph must describe an issue or subject. There must be continuity between paragraphs. The text should contain:

(i) an introduction and background on the study or research;

(ii) a detailed description of the study or research which include theories, models, and materials and methods used;

(iii) the data collection and analysis techniques.

(iv) the main results and discussions; and

(iv) the conclusions and significance of the findings.

21. Citation in the Text

Citation is a means of formally recognizing within the text, the resources from which the information or idea were obtained. The purpose is to acknowledge the work of others, to demonstrate the body of knowledge in which the work is based on and to lead others.

22. Quotations in the Text

A quotation must be written in a separate paragraph. If the quotation is in a different language, it must be written in italic.

23. Tables in the Text

All tables must be numbered using Arabic numeric. A caption should be positioned at the top of the table. If the caption is written in a single line, it should be centered. If the caption is written more than one line, it should be align to the left. Tables must be numbered with respect to the chapter.

24. Figures in the Text

Illustrations such as maps, charts, graphs, drawings, diagrams, and photographs are referred as figures. All figures must be clear and of high quality. Figures must be numbered using Arabic numeric. A caption should be located at the bottom of the figure. If the caption is written in a single line, it should be centered. If the
caption is written in more than one line, it should be align to the left. Figures are numbered with respect to the chapter. A figure should be positioned after it has being cited for the first time in the text. All figures in the chapter can also be grouped together and positioned at an appropriate location. All figures must be listed in the List of Figures page. Illustrations in the form of CD's, slides, and others should be placed in specially made pockets glued to the inner side of the back cover. Oversized illustrations in the form of plans, maps, charts, graphs, and others should be reduced to fit a single page unless the oversized materials are absolutely necessary for clarity and understanding. For illustrations other than above, please refer to the following guidelines:

(i) Photographs
Photographs should be digitally embedded in the text unless absolutely impossible.

(ii) Newspaper Cuttings or Similar Materials
Copies of newspaper cuttings or similar materials should be of high quality.

25. References
References are detailed description of items from which information were obtained in preparing the thesis. All references must be listed at the end of the text.

26. Further Work
27. Summary & Conclusion
28. Appendix
Appendices are supplementary materials to the text. These include tables, charts, computer program listings, and others.

29. Bibliography
The bibliography should contain entries of all references used in the preparation of the paper including all references cited in footnotes and every work relevant to the author's formulation and solution of problem.
**WRITING SYNOPSIS FOR A M.Phil or Ph.D. RESEARCH PROJECT**

In order to encourage and expand M.Phil or Ph.D. research, there is need to make it an active part of the academic life of the National Defence University. As a prestigious University of Pakistan, we have to ensure that a reasonable standard of research is maintained at NDU. The University regulates through its bodies like the Advanced Studies and Research Board that the M.Phil and Ph.D. research programs are properly planned and executed to maintain the standards.

A research proposal for MSc/M.Phil/ Ph.D. registration purely for social sciences should include certain basic components, in which a number of questions need to be addressed. Why research on the proposed topic should be undertaken and what gains are likely to be achieved? What has been done previously in this or related areas? What are the objectives of this study and how these will be achieved? Are the facilities required for doing the proposed research available? An extensive initial exercise should help in designing a sound research project, which is likely to make a significant contribution in successful completion of MSc/M.Phil/Ph.D. research.

**Components of a Synopsis**

The following components should be provided in a synopsis of M.Phil and Ph.D. research project. The details may, however, vary according to the field of study.
2. **Topic**

The topic for research should be selected carefully. It should be specific and about the general issues at national or international level.

3. **Introduction**

It should provide a brief description to explain the area of the proposed research work by the researcher.

4. **Review of Literature**

A review of the relevant literature is another very important part of the synopsis, showing the work done previously in the area of proposed research is essential to plan further research effectively and in a proper way. The information given in the review should be supported by references.

5. **Justification and Likely Benefits**

It is important to provide justification for undertaking the proposed research, perhaps in the light of previous work done. It should be possible in most cases to predict the specific and general benefits likely to be achieved as a result of completion of the proposed research.

6. **Main Objectives of the Study**

Broad objectives to be achieved should be clearly mentioned and these should be itemized. These objectives will indicate the major aspects of the study to be undertaken.

7. **Hypothesis of Study**

Hypothesis is statement which is to be tested for possible acceptance or rejection. Hypothesis are of two types i.e. Null (Ho) and Alternative (H1). Null hypothesis is tested for possible rejection, where as alternative hypothesis is tested for possible acceptance.

8. **Significance of Study**

It emphasized on the significance/ importance of the research work/study i.e. why we selected the topic under discussion.

9. **Statement of Problem**

The researcher has to clearly identify the problem/issue selected for thesis.
10. Plan of Work and Methodology

A plan of work describing the various aspects of the study in a logical sequence along with the methodologies to be employed, are the most important crucks of any research plan. It helps to demonstrate that the researcher has a fairly good idea about the nature of work likely to be involved. In the case of social sciences what resource materials will be used; whether the required information will be obtained from primary or secondary sources, etc. A time schedule for the various aspects of the proposed research may be provided wherever possible. Methodology includes the following:-

- Sources of data (Primary or Secondary)
  Survey, questionnaires, Interviews, focus group interviews, observation, case-studies, diaries, critical incidents, portfolios, books, journals, periodicals, abstracts, indexes, directories, research reports, conference papers, market reports, annual reports, internal records of organizations, newspapers & magazines, CD-ROMs, on-line databases, Internet, videos & broadcasts.

- Sample size:
  Sample size should be normal neither too small nor too large.

- Data Collection Techniques (Registration, Questionnaires, interviews, Direct Observations)

- Analysis of Data
  Data is to be analyzed according to the requirement of topic. After collecting the data, it is to be tabulated. The total variables used are to be included in the study and then the relationship between variable will be analyzed.

11. Place of Work and Facilities Available

In order to complete the proposed research some specialized facilities may be required. For example in case of experimental sciences different equipments may be involved or in the case of, may be, a study on a scholar, the relevant literature may be available in a foreign country. Therefore it is important to identify the
place where the research work will be undertaken and whether the resources and facilities required for doing the research are available like easy access to the external academic markets via internet.

12. References and Bibliography

Synopsis should contain at the end a list of references, and a bibliography if required. These should be written on a standard pattern.

13. Length of a synopsis

It will be difficult to define an overall length for a synopsis for MSc/M.Phil/Ph.D. research in such varied fields of study. Whereas it should be concise as far as possible and avoid repetitions, it should also provide sufficient details on the various aspects mentioned above to show that the research involved has been well understood and planned, and it is of an acceptable academic merit. The total length of a synopsis may run from 1,500 to a few thousand words.
Chapter 3

MSc / M.Phil/Ph.D. THESIS
PATTERN

All theses presented in typescript for the degree of MSc/M.Phil/ Ph.D should comply with the following specifications unless permission to do otherwise is obtained from the relevant authority / body

- **SIZE OF PAPER**
  A4 size be used.

- **PAPER SPECIFICATION**
  Five copies on good quality paper (minimum 80 gsm) be submitted.

- **METHOD OF PRODUCTION**
  The text must be typewritten in acceptable type face (readable) and the original typescript (or copy of equal quality) must normally be submitted to Exam branch.

- **LAYOUT OF SCRIPT**
  Typescript should appear on one side only, lines; at least one-and-a-half spaced. Footnotes, quotations, references and photographic captions may be single spaced. Where appropriate, these should contain lists giving the locations of figures and illustrations.
• **FONT SIZE**

Title Page 18-22  
Headings / subheadings 14-16  
Text 10-12  
Footnotes 8-10  

Footnotes be given on the same page where reference is quoted.

• **TYPE STYLE**

Times New Roman

• **MARGINS.**

At least 1\(\frac{1}{4}\) -1\(\frac{1}{2}\) inches (3.17-3.81cm) on the left-hand side, 3/4 - 1 inch (2 - 2.54cm) at the top and bottom of the page, and about \(\frac{1}{2}\) - 0.75 inches (1.27 - 1.90cm) at the outer edge. The best position for the page number is at top-centre or top right \(\frac{1}{2}\) inch (1.27 cm) below the edge. Pages containing figures and illustration should be suitable paginated.
1. Abstract / Summary
2. Acknowledgements
3. Abbreviations not described in the text
4. Contents
5. List of Tables (where applicable)
6. List of Figures (where applicable)
7. Introduction (including literature review) or
   a. Introduction
   It should provide a brief description to introduce the area of the proposed research work.
   b. Review of Literature
   A review of the relevant literature showing the work done previously in the area of proposed research is essential to plan further research effectively. The information given in the review should be supported by references.
   As separate chapters as per requisite of the subject
8. Main Objectives
9. Hypothesis of Study
10. Significance of Study
11. Statement of Problem
12. Material and Methods
13. Results
   May comprised of one chapter or a number of chapters depending upon the subject matter/ requirements
14. Discussion (including Conclusion/s, Recommendation/s where applicable)
15. References / Bibliography / Literature Cited
16. Appendices (where applicable)
17. Any other information specific to the respective discipline
• LENGTH OF THESIS
  Whilst the regulations do not contain a clause relating to the maximum length of theses, it is expected that work presented for the degree of MSc should normally be between 40,000 - 120,000 words of text. Candidates wishing to greatly exceed these sizes should discuss the matter with their supervisors.

• PUBLISH WORK
  Published work from the theses be included as appendix (Reprints/ proof / preprint).

• BINDING
  All final theses and published work presented for higher degrees must be bound in a permanent form or in a temporary (hard binding will be provided after defense of the thesis) form approved by the Advanced Studies and Research Board; where printed pamphlets or off-prints are submitted in support of a thesis, they must be bound in with the thesis, or bound in such manner as Binderies may advise. Front cover should give title of the thesis, name of the candidate and the name of the Institute/ Department/ Centre/ College through which submitted, in the same order from top to bottom. The lettering may be in boldface and properly spaced. Their sizes should be: title 24 pt., name of the candidate 18 pt. and the name of the department/ institute/ centre/ college 18 pt. The colour of binding for different degrees in the Science subjects and Social Sciences is as follows:

  SOCIAL SCIENCES
  Ph.D.     Sky Blue with Golden Lettering
  M.Phil    Black with Golden Lettering
  MSc       Black with Golden Lettering
Spine of the thesis should show "Ph.D thesis" on top across the width of spine, name of the candidate in the middle and the year of submission across the width at the bottom.
Research Facilities for students at NDU Library

1. **Library**. The University has a well-stocked library for reading and reference material. It subscribes to a variety of magazines of international repute and standing, which can serve as a useful tool for your research.

2. **MERLN Database**. Military Education Research Library Network (MERLN) database has also been provided at the Library. The system has vast database and considered by many a useful resource for pursuing quality research work. DD Library may be approached for necessary guidance to consult the site.

3. **HEC – National Digital Library**. NDU library has acquired access to HEC National Digital Library. It provides access to international scholarly literature based on electronic delivery. The resources are high quality peer reviewed journals, databases, articles and e-books across a wide range of disciplines.

4. **Internet**. The University has provided quality internet connections at the following places:-
   a. All residences at the campus.
   b. Main library.
   c. Computer laboratory.

5. **Archives**. Research papers produced by the participants of the previous courses can also be consulted for guidance with the prior permission of Thesis Supervisor.

**Plagiarism Policy**

*Note: The Plagiarism Policy in detail is available at NDU Exam branch as well as on NDU Website: [www.ndu.edu.pk](http://www.ndu.edu.pk)*
Chapter 5

**FLOW DIAGRAM**

**MSc Thesis - steps to be taken**

1. **Selection of Topic in consultation with Supervisor allocated**
2. **Submission & Approval of Synopsis to the Supervisor**
3. **Submission of Thesis to HoD through Supervisor in spiral binding**
4. **Evaluation of thesis by External Examiners**
5. **Revision of Thesis within one month (only one chance)**
   - If Rejected
   - If approved
6. **Conduct of Viva Voce**
7. **If approved**
   - Submission of five hard bounded copies to the dept for onward distribution to Exam branch for Declaration of Result
8. **After Declaration of Result the distribution of hard copies as follows:**
   - HoD
   - Exam branch
   - NDU Main Library
   - Supervisor
   - Student concerned
✓ Appointment of supervisors by ASRB

✓ Selection of Topic for dissertation recommended by Supervisor & HoD (2nd week of 3rd Sem)

✓ Approval of topic by ASRB within 30 days from the commencement of 3rd Semester

✓ In addition to satisfactory report a student should maintain GPA of 2.5 on the basis of course work

✓ If both reports unsatisfactory, he/she ceases to be student of the university

✓ In case a student fails to complete M.Phil/MS requirement within normal period of 4 semester, ASRB allow him/her an extension for maximum period of 02 semester on the recommendation of supervisor duly endorsed by HoD

✓ No further extension - if failed to submit his/her dissertation by the end of 6 semester shall cease to be a student of the university

✓ Submission of 2 progress reports by supervisor during the 6th week of 3rd sem to Controller of Examinations

✓ Submission of 5 copies of dissertation approved by the supervisor to Controller of Exams before final exams ✓ (2nd week of 4th sem)

✓ Appointment of External Examiner by President NDU from the approved panel of examiner by ASRB

✓ Intimation about date of Viva Voce Exams by supervisor to Controller of Examination through HoD (6th week of 4th sem)

✓ Submission of application on prescribed form to Controller of Examinations for admission to final exams for M.Phil/MS ✓ (2nd week of 4th sem)

✓ Evaluation of thesis within time indicated by Controller of Examinations (8th week of 4th Sem)

✓ Submission of detailed report with regard to evaluation of dissertation by external examiner ✓ (9th week of 4th Sem)

✓ Viva Voce in defence of dissertation be conducted by a committee consisting of HoD, Supervisor & External Examiner

✓ Viva Voce exam conducted at university campus on scheduled date notified by Controller of Examinations

✓ Award of Degree to Successful students
Approval of Standing list of foreign External Examiners by ASRB in respect of technologically advanced countries for each Department consisting of persons of eminence in the respective field of research

Submission of six unbound copies of completed thesis along with an application on prescribed form for the evaluation of thesis, duly forwarded by supervisor and the HoD

Appointment of External Examiners for Evaluation of Thesis

Submission of detailed evaluation report of the thesis by supervisor

If the thesis is adjudged as adequate by two of the three external examiners, ASRB shall allow the candidate to appear in the viva-voce (Thesis Defence) examination.

In case of major modification/revision of the thesis, the candidate shall be required to resubmit a revised version, duly certified by the supervisor, within a period as specified by ASRB. The revised version of the thesis shall be approved by the same external examiners who suggested modification/revision of the thesis.

Viva-Voce Examination, Ph.D.

If the candidate fails to satisfy the examiners in the viva-voce examination he/she may be given a chance to defend the thesis for the second and final time within a suitable period but not exceeding six months.

A candidate who successfully completes all the requirements shall be awarded, with the approval of the ASRB and the Senate, the degree of Ph.D.

The President NDU may approve the recommendations of the Advanced Studies & Research Board on behalf of the Senate regarding the award of Ph.D. degree to the candidate.

Note:-
A copy of thesis is to be submitted to the HEC for record as per requirement.