ISBN: 978-971-95208-8-7 (Online) 978-971-95208-7-0 (Print)

University Thesis and Dissertation Manual



Published by Polytechnic University of the Philippines Sta. Mesa, Manila www.pup.edu.ph

Philippine Copyright 2017

by the Polytechnic University of the Philippines

ISBN 978-971-95208-8-7 (Online) 978-971-95208-7-0 (Print)

All rights reserved. Portions of this manual may not be reproduced in any form without prior written permission from the University.

Inquiries should be addressed to:

Office of the Vice President for Research, Extension, and Development Polytechnic University of the Philippines

A. Mabini Campus, Anonas Ext., Sta. Mesa,

Manila, Philippines

Tel No: (632) 310-0418

(632) 3351-787 (local) 323, 273

Website: http://www.pup.edu.ph E-mail: vprepd@pup.edu.ph

Editors:

Edelyn M. Mariano Christine A. del Rosario Edelyn H. Dagñalan Emejidio C. Gepila, Jr.

Typeset/Layout:

Jesusana S. Dejito

Foreword

This manual is produced by the PUP Office of the Vice President for Research, Extension, and Development in its effort to unify the standards for writing theses and dissertations as course requirement for the undergraduate level and as final requirement in the master's and doctoral levels. This contains the revised set of guidelines on the organization and style of the manuscript, and the process of application, presentation, and submission of theses and dissertations.

The Policy Manual for Thesis and Dissertation, produced by the Graduate School, has served as major reference for this work. This was completed after several meetings and consultations with the members of the committee as well as with program chairpersons and deans in the undergraduate and graduate levels, and was approved by the University Executive Committee and the Board of Regents. The completion of this project was made possible through the cooperation of the members of the Committee on the Development of Thesis/Dissertation Manual who willingly spent time in reviewing the manuscript and eagerly shared their knowledge at every coordination meeting. Much appreciation also goes to the deans and chairpersons of the colleges for their gracious accommodation of every invitation and inquiry extended to them while finalizing this manual.

The University trusts that this manual will serve its purpose of standardizing researches produced in PUP and will contribute to the Institution's thriving research culture.

DR. JOSEPH MERCADOVice President for Research,
Extension, and Development

Table of Contents

Copyright page	
Foreword	
Introduction	1
Parts of a Thesis/Dissertation Writing for Graduate Programs	1
Application for Thesis/Dissertation Writing	4
The Three-Tiered Defense Process	4
	-
First Stage : Proposal Presentation Second Stage : Pre-oral Defense	4 5
Third Stage : Oral Defense	5 5
· ·	
Parts of a Thesis/Dissertation	6
Manuscript Preparation	8
Paper and Printing Specifications	8
Font Specifications	8
Spacing	8
Margins	8
Page Numbering	9
Preliminaries	9
Copyright Page	
Certification-and-Approval Sheet	9
Acknowledgments	9 10
Certification of Originality	10
Abstract	10
Table of Contents	10
List of Tables	12
The Text or Body of the Paper	13
Chapter and Subheadings	14
Definition of Terms	14
Review of Literature and Studies	15
Tables and Figures Drawings and Photographs	15
Italics	17
In-Text Citation	17
Long Quotations	18 19
Chapter 4 Subheadings	19
Chapter 5 Subheadings	20
References	20
Appendices	21
Biographical Statement	21

Conducting Oral Defense	22
Grading System	23
Statistical and Editorial Consulting	25
Required Number of Final Copies	25
Binding Specifications and Submission of Manuscripts	25
Application for Copyright	26
References	27
Appendices	
Appendix 1: University Research Agenda	30
Appendix 2: Functions of the Thesis/Dissertation	
Evaluation Committee	40
Appendix 3: Proposal Presentation Evaluation Form	42
Appendix 4: Proposal Acceptance and Approval Form	43
Appendix 5: Pre-oral Evaluation Sheet	45
Appendix 6: Final Presentation and Defense	
Approval Form	46
Appendix 7: Functions of the Panel on Oral	40
Examination	48
Appendix 8: Oral Defense Evaluation Sheet	49
Appendix 9: Cover Page Format	
Appendix 10: Title Page Format	50
Appendix 11: Copyright Page Format	51
Appendix 12: Certification-and-Approval Format	52
	53
Appendix 13: Certification of Originality Format	54
Appendix 14: Abstract Format	55
Appendix 15: Spine Format and Color	56

I. Introduction

The Polytechnic University of the Philippines expects students to produce original researches that manifest their ability to undertake and present quality written outputs that will contribute to the advancement of knowledge in their respective fields of study. It is required that the chosen research topic of the thesis or dissertation falls within the program research agenda as defined by the University (see Appendix 1: University Research Agenda).

In writing a thesis or dissertation, students shall comply with the standards set by PUP. They are responsible for consulting the college/graduate school office regarding the requirements for writing their manuscripts and are discouraged from just following the format of another thesis or dissertation.

The college/graduate school approves the final thesis or dissertation and reserves the right to reject documents that deviate from the guidelines specified in this manual. Students are advised to read this manual carefully, paying close attention to the details of manuscript preparation, including the samples in the Appendices. In addition to structural formatting, they are also responsible for assuring that their manuscript follows conventional rules of grammar, punctuation, and spelling. The University requires that they seek the assistance of a professional editor to help them improve their work.

II. Parts of a Thesis/Dissertation Proposal

The thesis/dissertation proposal shall contain the following parts:

Quantitative Research	Qualitative Research
Preliminaries	Preliminaries
Title Page	Title Page
Table of Contents	 Table of Contents
List of Tables (if any)	 List of Tables (if any)
List of Figures (if any)	List of Figures (if any)

Quantitative Research		Qualitative Research	
Chapter 1 THE PROBLEM AND ITS SETTING Introduction Theoretical Framework Conceptual Framework Statement of the Problem Hypothesis (if any, depending on the nature of the problem) Scope and Limitations of the Study Significance of the Study Definition of Terms (for technical programs only)		Chapter 1 THE PROBLEM AND ITS SETTING Introduction Statement of the Problem Thesis Arguments (if any, depending on the nature of the problem)	
sha • Sy	REVIEW OF LITERATURE AND STUDIES nematic organization of literature all be followed) nthesis of the Reviewed erature and Studies	sha ● Syn	REVIEW OF LITERATURE AND STUDIES ematic organization of literature Il be followed) thesis of the Reviewed Literature Studies
Chapter 3	METHODOLOGY	Chapter 3	METHODOLOGY
following pro	, and CAL programs/ , Applied Statistics, and	Tr G So In	esearch Design adition of Inquiry and Data- eneration Method ources of Data strumentation chical Considerations
M	ethod of Research	(Mix	red methodology is allowed.)
De Re Da	opulation, Sample Size, and Sampling Technique escription of Respondents esearch Instrument eta-Gathering Procedure eatistical Treatment of Data	AB History (Chapter 1 s Chapters 1-3 shall depend given, but th	shall cover the discussion of 3. The number of chapters d on the number of problems he last Chapter— <i>Konklusyon at</i> syon shall be retained)
Food Techn Qu M Po De Re	BS Nutrition and Dietetics, BS nology, and BS Chemistry antitative Research ethod of Research opulation, Sample Size, and Sampling Technique escription of Respondents esearch Instrument ata-Gathering Procedure	recomenda	oyon shan be retained;

Experimental / Taxonomic / Ecological Research Research Design Description of Respondents / Organism / Area of Study Experimental Protocol Statistical Treatment of Data BS Engineering and Master of Science in Engineering	
Ecological Research Research Design Description of Respondents / Organism / Area of Study Experimental Protocol Statistical Treatment of Data BS Engineering and Master of Science in	
Research Design Description of Respondents / Organism / Area of Study Experimental Protocol Statistical Treatment of Data BS Engineering and Master of Science in	
Description of Respondents / Organism / Area of Study Experimental Protocol Statistical Treatment of Data BS Engineering and Master of Science in	
Organism / Area of Study Experimental Protocol Statistical Treatment of Data BS Engineering and Master of Science in	
Experimental Protocol Statistical Treatment of Data BS Engineering and Master of Science in	
BS Engineering and Master of Science in	
Research Design	
Flowchart of Research Design/	
Process Flowchart	
Description of Research Instrument Used	
Material Requirements	
Mix Design	
Specimen Details	
Laboratory Experiment/Field	
Experiment	
Master of Science in Information	
Technology	
Research Design	
Sources of Data	
Research Instrument	
Data Generation Procedure Ethical Considerations	
Data Case Analysis	
Proposed System Architecture	
BS Computer Science	
Research Design	
Sources of Data	
Instrument	
Data Generation/	
Gathering Procedure	
Statistical Data Analysis	
BS Mathematics, BS Applied Mathematics,	
Economics, and BS Physics	
(Content shall be based on the requirement	
of the research method to be used.)	

Quantitative Research	Qualitative Research	
REFERENCES	REFERENCES	
APPENDICES ■ Instrument ■ Biographical Statement ■ Calendar of Activities (if applicable) ■ Estimated Expenses (if applicable)	APPENDICES Instrument Biographical Statement Calendar of Activities (if applicable) Estimated Expenses (if applicable)	
Notes: Other attachments required by the panel may be added	Notes: Other attachments required by the panel may be added	

III. Application for Thesis/Dissertation Writing for Graduate Programs

The following steps shall be followed in applying for thesis/dissertation writing:

- 1. After passing the comprehensive examinations, the researcher shall submit his research proposal to the Program Chair who will recommend the adviser and panel of examiners to the Dean.
- 2. After the approval of the research proposal, the researcher shall enrol in the Thesis/Dissertation Writing course and pay the thesis proposal fee, together with the originality check processing fee.
- 3. Once enrolled, copies (four [4] for thesis, and five [5] for dissertation) shall be submitted to the Program Chair. The chair shall recommend the research proposal to the dean and the tentative date for the title defense.
- 4. The Dean shall endorse the proposal to a Thesis/Dissertation Evaluation Committee composed of the adviser and evaluators (two for the thesis and three for the dissertation). See Appendix 2: Functions of the Thesis/Dissertation Evaluation Committee.

IV. The Three-Tiered Defense Process for Graduate Programs

First Stage: Proposal Presentation

The student shall present his proposal to the Thesis/Dissertation Evaluation Committee. After the presentation, the secretary shall provide the student with a summary of the recommendations to serve as his guide in making the necessary revisions.

To proceed to the second stage, the researcher shall submit to the office (Graduate School/Open University System/College of Education--Graduate Studies) a copy of the Certification for Approved Research Proposal before the data-gathering and the rest of the thesis-/dissertation-writing process.

Second Stage: Pre-oral Defense

Upon the completion of Chapters 4 and 5 of the paper and the endorsement of the adviser and the Program Chair, the student shall proceed with the Pre-oral Defense. During this stage, the completed research shall be presented for evaluation by the same thesis/dissertation committee (see Sec. V for the complete parts of the thesis/dissertation).

Four (4) copies of thesis or five (5) copies of dissertation together with the proof of payment of the pre-oral fee shall be submitted to the concerned Office at least seven (7) days before the scheduled defense.

The student shall submit to the Office a copy of the Certification for Oral Thesis/ Dissertation Defense.

Third Stage: Oral Defense

After complying with the pre-oral recommendations, and upon the endorsement of the adviser to the Program Chair as approved by the Dean/Executive Director, the student shall now proceed with the Oral Defense.

Six (6) copies of thesis or seven (7) copies of dissertation shall be submitted to the Office at least seven (7) days before the Oral Defense schedule. These copies shall be distributed to the members of the Panel on Oral Examination (POE), the adviser, and the Secretary.

The Program Chair shall recommend to the Dean/Executive Director the Panel on Oral Examination (POE) who shall conduct the final evaluation of the thesis/dissertation. The POE shall be composed of a chair and three members for a thesis while a chair and four members for a dissertation. The thesis/dissertation evaluators during the proposal defense, excluding the adviser, shall also be members of the POE. When necessary, a non-PUP faculty member or outsider (researcher or practitioner from any other university/agency) may sit as a panel member upon the approval of the Dean/Executive Director (see Appendix 7: Functions of the Panel on Oral Examination).

The members of the POE shall submit their final evaluation of the thesis/dissertation with their comments/ recommendations. The secretary shall provide the student with a summary of the recommendations to serve as guide in making the revisions for the final copy which is a graduation requirement. **See Appendix 8: Oral Defense Evaluation Sheet.**

V. Parts of a Thesis/Dissertation

The parts of the thesis/dissertation for pre-oral and oral defense shall be as follows:

Preliminaries

Copyright Page
Title Page
Certification-and-Approval Sheet
Acknowledgments
Certification of Originality
Abstract
Table of Contents
List of Tables
List of Figures

NB: Pagination of preliminaries shall be in lowercase Roman numerals placed at the bottom center of the page.

Quantitative Research	Qualitative Research
Chapter 1 THE PROBLEM AND ITS SETTING Introduction Theoretical Framework Conceptual Framework Statement of the Problem Hypothesis (if any) Scope and Limitations of the Study Significance of the Study Definition of Terms (for technical programs only)	Chapter 1 THE PROBLEM AND ITS SETTING Introduction Statement of the Problem Thesis Arguments (if any) Theoretical Framework Conceptual Framework Scope and Limitations of the Study Significance of the Study
Chapter 2 REVIEW OF LITERATURE AND STUDIES (Thematic arrangement of literature and studies shall be followed.) Synthesis of the Reviewed Literature and Studies	Chapter 2 REVIEW OF LITERATURE AND STUDIES (Thematic arrangement of literature and studies shall be followed.) Synthesis of the Reviewed Literature and Studies

Quantitative Research	Qualitative Research
Chapter 3 METHODOLOGY	Chapter 3 METHODOLOGY
Format of Chapter 3 may vary depending on the research design employed by the program.	Research Design Tradition of Inquiry and Data- Generation Method Sources of Data Instrumentation Ethical Considerations
	(Mixed methodology is allowed.)
	AB History (Chapter 1 shall cover the discussion of Chapters 1-3. The number of chapters shall depend on the number of problems given, but the last Chapter—Konklusyon at Rekomendasyon shall be retained)
Chapter 4 RESULTS AND DISCUSSION	Chapter 4 RESULTS AND DISCUSSION
(Only the main topics per problem shall appear as headings. The number of subheadings shall be consistent with the number of subproblems posed in Chapter 1.)	(Only the main topics per problem shall appear as headings. The number of subheadings shall be consistent with the number of subproblems posed in Chapter 1.)
Chapter 5 SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS Summary of Findings	Chapter 5 SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS Summary of Findings
Conclusions Recommendations	Conclusions Recommendations
References (APA latest edition)	References (APA latest edition)

Quantitative Research	Qualitative Research
Appendices	Appendices
Instrument	Instrument
Correspondence	Correspondence
Transcription (if applicable)	Transcription (if applicable)
Certification of Originality Check	Certification of Originality Check
Certification of Statistical	Certification of Statistical
Treatment	Treatment
Certification of Editing	Certification of Editing
Biographical Statement (a	Biographical Statement (a
paragraph consisting of 100-150 words)	paragraph consisting of 100-150 words)

VI. Manuscript Preparation

In the preparation of the manuscript, care shall be taken to ensure that the following specifications are followed:

Paper and Printing Specifications

Print the final copy with a laser printer using only one side of a standard-sized PUP template (8.5 x 11 inches).

Font Specifications

Use 11-point Arial font throughout the thesis or dissertation except when compressing a large table.

Spacing

Double space the text; single-space long quotations, table and figure captions, and similar special materials (e.g., table legend). Type triple-spaced from the top margin, centered, boldfaced, and in ALL CAPS all headings of the preliminary section (except the Copyright Page and Title Page) and all chapter titles.

Margins

Leave 1.5 inches for the left margin to allow for binding and trimming and 1 inch for the top, bottom, and right margins.

Page Numbering

Paginate the preliminaries by using lowercase Roman numerals at the center, bottom margin.

Use Arabic numerals to paginate the text, references, and appendices. Number all the pages consecutively starting at number 2 on the second page of the first chapter. The first page of each chapter, though counted, shall not be numbered.

Type the page number at the upper right-hand corner of the paper (i.e., tables and figures).

Preliminaries

The preliminaries include the copyright page, title page, certification-and-approval sheet, certification of originality, acknowledgments, abstract, table of contents, list of tables, and list of figures.

Copyright Page

Include a Copyright Page in each final copy to show that the research has been copyrighted and put it before the Title Page. (See Appendix 11: Copyright Page format and text).

Apply for the copyrighting of the manuscript at the PUP Intellectual Property Management Office. Five (5) CDs of soft copy shall be prepared for copyright purposes.

Cover and Title Pages

Follow the instructions on the attached sample-form pages. Note which items are in ALL CAPS and which are not. Note the approximate size of the print (see Appendix 9: Cover Page Format; and Appendix 10: Title Page Format).

Certification-and-Approval Sheet

Prepare a Certification-and-Approval Sheet. Refer to the attached sample for the wording and format that shall be followed faithfully. Include this sheet in each final copy of the research.

The **CERTIFICATION** is an attestation by the Thesis/Dissertation Evaluation Committee that the paper has been examined and recommended for oral examination. Type triple-spaced from the top margin, centered, boldfaced, and in ALL CAPS the heading **CERTIFICATION**.

POLICY MANUAL FOR THESIS AND DISSERTATION

The **APPROVAL** contains the formal approval or commendation of the Panel on Oral Examination (three members for a thesis and five members for a dissertation, both headed by a chair). (**See Appendix 12: Certification-and-Approval Format.**)

Acknowledgments

Type triple-spaced from the top margin, centered, boldfaced and in ALL CAPS the heading **ACKNOWLEDGMENTS**. Double-space the text that begins three single spaces from the heading.

Certification of Originality

Type triple-spaced from the top margin, centered, boldfaced, and in ALL CAPS the heading **CERTIFICATION OF ORIGINALITY**. Double-space the text that begins three spaces from the heading.

All copies to be submitted shall contain an original Certification of Originality bearing the actual (not photocopied) signature of the researcher.

Abstract

The abstract is a brief descriptive summary of the thesis or dissertation. It contains the main objective of the study, a brief description of the research method, major findings, conclusions or main arguments, and recommendations.

Type triple-spaced from the top margin, centered, boldfaced, and in ALL CAPS the heading **ABSTRACT**. Type triple-spaced from the heading the following data that are double-spaced, flush with the left margin: thesis/dissertation title, researcher's name, degree, name of granting institution, year of completion, and adviser's name.

The abstract, which shall not exceed 250 words, is double spaced, except the title of the thesis or dissertation which is typed single-spaced. A minimum of five (5) keywords shall be written on the lower part of the abstract page with the "Polytechnic University of the Philippines" and the title of the program being constant keywords. (**See Appendix 14: Abstract Format**)

Table of Contents

The Table of Contents comes after the abstract. Type triple-spaced from the top margin, centered, boldfaced, and in ALL CAPS the heading **TABLE OF CONTENTS**. Type double-spaced from the heading. It shall list all elements of the preliminaries, chapter titles, main headings, references, and appendices. The beginning page number of each section is indicated along the right margin. The numbering of the chapters and the wording, capitalization, and punctuation of titles and headings, shall be exactly the same as they are in the text.

POLICY MANUAL FOR THESIS AND DISSERTATION ————

Below is the format for four levels of heading adapted from the APA Publication Manual Style 6^{th} Edition.

Example:

TABLE OF CONTENTS

		Page
Titl	e Page	i
Cei	rtification and Approval Sheet	ii
	knowledgments	iii
	rtification of Originality	iv
Ab	stract	V
	ole of Contents	vi
	t of Tables	vii
Lis	t of Figures	viii
1	The Problem and Its Setting	
	Introduction	1
	Theoretical Framework	8
	Conceptual Framework	12
	Statement of the Problem	13
	Hypothesis	
	Scope and Limitations of the Study	14
	Significance of the Study	16
	Definition of Terms (for technical programs only)	17
2	Review of Literature and Studies	
	Exclusion of Learning Styles in the Development of Teaching Methodologies	20
	Innateness of Skills in Second Language Teaching	25
	Processes and Micro Skills of Listening Skills	30
	Testing Procedures of Listening Processes and Micro Skills	35
	Synthesis of the Reviewed Literature and Studies	100
3	Methodology	
	Method of Research	101
	Population, Sample Size, and Sampling Technique	103
	Description of Respondents (if any)	106

POLICY MANUAL FOR THESIS AND DISSERTATION —

Research Instrument	110
Data-Gathering Procedure	115
Statistical Treatment of Data (may not be applicable in qualitative research	h) 120
4 Results and Discussion	
Learning Style Profile of the Participants	130
Participant's Responses in Emotional Stimulus	132
Participants' View of Motivation as Stimulus	135
Participants' View of Motivation as Stimulus.	137
5 Summary of Findings, Conclusions, and Recommendations	
Summary of Findings	143
Conclusions	144
Recommendations	145

List of Tables

Type triple-spaced from the top margin, centered, boldfaced, and in ALL CAPS the heading **LIST OF TABLES**. Type double-spaced from the heading the following data in three columns: number, title, and page. The title of each table must be centered, boldfaced, and in title case. Single-space must be observed within the title, but double-space between titles.

An example is given below.

LIST OF TABLES

Number	Title	Page
1	Distributions of the Population and Sample per Sector	35

The Text or Body of the Paper

Below is the APA Publication Manual Style 6th Edition format of five levels of heading that will be used in writing the text or body of the paper.

Levels	Format
1	Centered, Boldface, Title Case
2	Flush Left, boldface, uppercase, and lowercase heading
3	Indented, boldface, lowercase paragraph heading ending with a period
4	Indented, italicized, boldface, lowercase paragraph heading ending with a period
5	Indented, italicized, lowercase paragraph heading ending with a period

Example:

Method (Level 1)

Participants (Level 2)

Participants were 80 university students (35 men, 45 women) whose mean age was 20.25 years (SD = 1.68). Approximately 70% of participants were European American, 15% were African American, 9% were Hispanic American, and 6% were Asian American. They received course credit for their participation.

Procedure (Level 2)

Recruitment. (Level 3)

Session 1: Psychiatric diagnoses. During the initial interview session, doctoral level psychology students assessed participants for psychiatric diagnoses. Eighteen percent of the sample met the criteria for generalized anxiety disorder according to the Structured Clinical Interview for *DSM–IV* Axis I Disorders (First, Gibbon, Spitzer, & Williams, 1996).

Session 2: Assessments. All participants attended a follow-up session to complete assessments. Participants were instructed to bring a friend with them who would complete the other-report measures.

Self-report measures. (Level 4)

State and trait anxiety. (Level 5)

Rejection sensitivity. Participants took the Rejection Sensitivity Questionnaire (RSQ; Downey & Feldman, 1996), an 18-item self-report measure that assesses rejection sensitivity.

1. Chapter and Subheadings

- 1.1 Begin each chapter on a new page.
- 1.2 Capitalize only the first letter of the heading Chapter but type in ALL CAPS and centered the title of the chapter. Both the chapter heading and the title are typed in bold font.
- 1.3 Use Arabic numerals for the chapter numbers.
- 1.4 Type triple-spaced from the top margin and centered the chapter number heading. Type double-spaced below the chapter heading the title of the chapter.

Example:

Chapter 1

THE PROBLEM AND ITS SETTING

- 1.5 Type the subheading or the first line of the introductory paragraph of the chapter (if there is no subheading) three spaces below the chapter title.
- 1.6 Type subheadings of a chapter in a bold face, flush with the left margin, capitalizing only the first word, all major words, and prepositions of five (5) or more letters e.g., **Introduction**. Subheadings do not have any end punctuation.
- 1.7 Start another subheading with one triple space (or three spaces) below the last line of the immediately preceding paragraph.
- 1.8 Have at least two full lines below a subheading at the bottom of a page, or else carry over the subheading to the next page.

2. Definition of Terms

- 2.1 Only the variables or key terms included in the study shall be defined.
- 2.2 Acronyms need not be defined if their meanings have been mentioned in the text.

Example:

The Housing and Land Use Regulatory Board (HULRB), the agency that provides for the preparation and implementation of the comprehensive land use plans for local government units...

2.3 A term shall be defined operationally (i.e., how it is used or measured in the study), or theoretically/technically (i.e., how it is defined in published resources).

- 2.4 Definitions taken from a published source shall bear an appropriate in-text citation and have a corresponding entry in the reference list/works cited.
- 2.5 The terms shall be sequenced in alphabetical order.
- 2.6 If the terms consist of more than one word, capitalize every major word.
- 2.7 The term to be defined shall be indented, typed in a bold face, and punctuated with a period. Two spaces shall separate the period from the definition.
- 2.8 Each definition shall be expressed in a complete sentence, NOT a phrase.
- 2.9 Symbols and abbreviations shall be enclosed in parentheses following their spelled-out nomenclatures.

Example:

 $\text{Pi}(\pi)$. This term refers to a mathematical constant and a transcendental real number, approximately equal to 3.14159, which is the ratio of a circle's circumference to its diameter in Euclidean geometry, and has many uses in mathematics, physics, and engineering. In this study, the π was used to calculate...

3. Review of Literature and Studies

- 3.1 The Review of Literature and Studies shall be organized thematically; therefore, the subheadings will be based on the themes/topics. A synthesis of the reviewed literature and studies should be placed at the end of the chapter.
- 3.2 Except for classical theories and any other relevant literature, all the literature and studies included in the review shall have been published or written (if unpublished, such as theses and dissertations) at least ten (10) years before the conduct of the current study.
- 3.3 Except for exploratory studies, the **minimum number of literature and studies to be reviewed** shall be pegged at twenty (20) or more for undergraduate thesis, forty (40) or more for Master's, and fifty (50) or more for doctoral.

4. Tables and Figures

- 4.1 Type above every table its number and title.
- 4.2 Type the table number at the center and triple-spaced from the last line of the immediately preceding paragraph.

4.3 Type the title of the table at the center, title case, and double–space from the table number, and triple-spaced to the table.

Example:

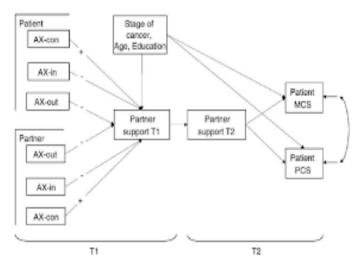
Table 1

Character Resemblance Score for Experimental Groups

Experimental Group				
Eric Cartman Resemblance	10 hrs of South Park Watching	10hrs of Teletubbies Watching	No TV (Control)	Simple Effects: F Df (2, 30)
Males	10.67a	10.50a	10.33a	
IVIAICS	(2.50)	(2.34)	(1.63)	.04
Females	1.83a	10.50b	4.50a	15.74
remales	(1.60)	(2.59)	(1.52)	15.74

- 4.4 Type triple—spaced from the last line of the immediately preceding paragraph its figure number and title.
- 4.5 Type the title of the figure flush left, title case, and single–space immediately after the figure number.
- 4.6 The numbering of tables and figures shall be continuous.

Figure 1. Theory through a Set of Path Models



- 4.7 If the title is long, align to the first word of the title the rest of the title.
- 4.8 Use the landscape page layout for large tables.
- 4.9 If the table is still too large to fit a single page, reduce the Arial font to a minimum of 8 points.
- 4.10 If the table does not fit the page even after the font-size reduction, continue the rest of its part to the next page, but the cut part shall bear the subtitle, 'Continuation'flush with the left margin (e.g., Continuation of Table 14). The cut part/s shall also show the column headings and the legend (if any) like those in the first part of the table.
- 4.11 Put two or more small tables or figures on a single page if the page is big enough to accommodate them all.
- 4.12 Have small tables and figures appear on the same page along with the text; however, leave three spaces between every table/figure and the texts above and below it.
- 4.13 The width of the table shall be dependent on the length of its title.

5. Drawings and Photographs

The mechanics to be used in Tables and Figures shall also be applied in drawings and photographs since they are all considered as figures.

6. Italics

Use italics for

- 6.1 titles of books, periodicals, films, videos, TV shows, and microfilm publications, except for words within the title of a book in text that would normally be italicized and should be set in Roman type (reversed italization);
- 6.2 genera, species, varieties;
- 6.3 introduction of a new, technical or key term or label (after a term has been used once, do not italicize it);
- 6.4 a letter, word, or phrase cited as a linguistic example;
- 6.5 words that could be misread;
- 6.6 letters used as statistical symbol or algebraic variables;
- 6.7 some test scores and scales;
- 6.8 periodical volume numbers in reference lists;
- 6.9 anchors of a scale; and
- 6.10 Filipino and any other foreign terms used in the text.

POLICY MANUAL FOR THESIS AND DISSERTATION

Do not use italics for foreign phrases and abbreviations common in English (i.e. phrases found as main entries in Merriam-Webster Collegiate Dictionary, 2005) chemical terms, trigonometric terms, non-statistical subscripts to statistical symbols or mathematical expressions, Greek letters, mere emphasis, and letters used as abbreviations.

7. In-Text Citation

Use the American Psychological Association (APA) style in the in-text citation of theses/ dissertations of all programs.

The APA style follows the author-date method of in-text citation. This means that the author's last name and the year of publication for the source shall appear in the text, e.g., (Jones, 2006) or "According to Jones (2006)...".A page number of the source, however, shall be included in the in-text citation in case of direct quotations, e.g., (Jones, 2006, p. 199).

The author-date method of citation requires that the surname of the author (do not include suffixes such as Jr.), and the year of publication be inserted in the text at the appropriate point.

Examples:

One Work by One Author

- Kessler (2003) found that among epidemiological samples
- Early onset results in a more persistent and severe course (Kessler, 2003)
- In 2003, Kessler's study of epidemiological samples showed that ...
- Among epidemiological samples, Kessler (2003) found that The study also showed that there was a high rate of comorbidity....(Kessler, 2003).

One Work by Multiple Authors

When a work has two authors, cite both names every time the reference occurs in text. When a work has three, four or five authors, cite all authors the first time the reference occurs. In subsequent citations, include only the surname of the first author followed by et. al, (not italicized and with a period after al) and the year if it is the first citation of the reference within a paragraph.

- Kisangau, Lyaruu, Hosea and Joseph (2007) found (Use as first citation in text.]
- Kisangau et al. (2007) found [Use as subsequent first citation per paragraph thereafter.]
- Kisangau et al. found [Omit year from subsequent citations after first nonparenthetical citation within a paragraph.

Exception: If two references of more than three surnames with the same year shorten to the same form), cite the surnames of the first authors and of as many of the subsequent authors as necessary to distinguish the two references, followed by a comma and et al.

Examples:

- Ireys, Chernoff, DeVet, and Kim (2001) and Ireys, Chernooff, Stein, et al. (2001)
- ...as Kurtines and Szapocznik (2003) demonstrated
- ...as has been shown (Joneskog&Sorbom, 2007)
- Kosslyn, Koenig, Barrett, Cave, Tang, and Gabrieli (1996)

If a reference list includes publications by two or more primary authors with the same surname, include the first author's initials in all text citations, even if the year of publication differs.

- Light, I. (2006). Deflecting immigration: Networks, markets, and regulation in Los Angeles. New York, NY: Russell Sage Foundation.
- Light, M. A., & Light, I.H. (2008). The geographic expansion of Mexican immigration in the United States and its implications for local law enforcement. Law Enforcement Executive Forum Journal, 8, 73-82.

When a work has no identified author, cite in text the first few words of the reference list entry (usually the title) and the year. Use double quotation marks around the title of an article, a chapter, or a web page and italicize the title of a periodical, a book, a brochure, or a report.

9. Long Quotation

Place direct long quotations (four or more lines) in a free standing block of typewritten lines and omit quotation marks. Start the quotation on a new line, with the entire quotation indented five spaces from the left margin. Indent the first line of any subsequent paragraph within the quotation. Maintain single-spacing throughout the quotation and put the parenthetical citation after the closing punctuation mark.

10. Chapter 4 Subheadings

Subheadings in Chapter 4 are the findings of every problem stated in Chapter 1. These subtitles are numbered following the sequence of the subproblems in the Statement of the Problem and typed in block style, single-spaced, and in a bold face.

Do not put any enumeration under each subtitle. All major words and prepositions of five or more letters shall be capitalized.

Example:

1. Profile of the Respondents According to Sex, Age, Civil Status, Religion, Educational Attainment, Employment Status, Position, Eligibility, and Number of Years in the Service

11. Chapter 5 Subheadings

Chapter 5 shall only have the following three subheadings: Summary of Findings, Conclusions, and Recommendations.

Follow the rules of spacing for subheadings.

12. References

The American Psychological Association (APA) shall be used.

The References should contain the author's name, date of publication, title of the work, and publication data.

Invert all authors' names; give surnames and initials for up to and including seven authors (e.g., Author, A. A., & Author, B.B.) When authors number eight or more, include the first six authors' names, then insert three ellipsis points and add the last author's name.

If the reference list includes different authors with the same surname and first initial, the author's full first names may be given in brackets:

Janet, P. [Paul]. (1876). La notion de la personnalite' (the notion of personality]. Revenue Scientifique, 10, 574-575.

References in APA publications are cited in text with an author-date citation system and are listed alphabetically in the reference list. This style of citation briefly identifies the source for readers and enables them to locate the source of information in the alphabetical reference list at the end of the article. Each reference cited in text must appear in the reference list, and each entry in the reference list must be cited in text.

However, two kinds of material are cited only in the text: references to classical works such as the Bible and the Qur'an, whose sections are standardized access editions,

POLICY MANUAL FOR THESIS AND DISSERTATION

and references to personal communications. References in a meta-analysis are not cited in text unless they are also mentioned in the text.

Do not list studies included in a meta-analysis in a separate appendix. Instead, integrate these studies alphabetically within the References section, and identify each by preceding it with an asterisk.

*Brethscheider, J. G, & McCoy, N. L. (1968). Sexual interest and behavior in healthy 80- to 102-year-olds. Archives of Sexual Behavior, 14, 343-350.

The in-text citations to studies selected for meta-analysis are not preceded by asterisks.

Bandura, A. J. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice Hall.

Each reference shall be single-spaced with the first line typed flush with the left margin and the succeeding lines indented five spaces from the left margin.

13. Appendices

Appendices shall be provided for supplementary materials that are not appropriate for inclusion in the text.

- 13.1 Number the appendices using Arabic numerals, e.g., Appendix 1, Appendix 2, etc
- 13.2 Type the appendix title centered and triple-spaced from the top margin.
- 13.3 If lengthy, supplementary illustrative materials such as tables, figures, and references shall appear in appendices and be referred to at appropriate places in the text
- 13.4 List the appended work/document in the Table of Contents as it is numbered and entitled in the appendices, e.g., Appendix 1: Research Instrument.

14. Biographical Statement

This should be written in the third person and should contain at minimum, the following information:

- 14.1 Current position, department, and institution
- 14.2 Highest degree held, field, and institution granting that degree
- 14.3 Two or three publications

14.4 Current area of research or current research project

Example:

Juana dela Cruz is a Professor of Psychology at the Polytechnic University of the Philippines. She received her Master's degree in Psychology at the PUP Graduate School. Her recent publications include *Mindworks* (Rio Publishing, 2015), and *College Psychology* (Lao Books, 2008). Her current research interests include a documentary of mental illnesses among Filipino teenagers, and she is currently completing a translation and study of Ippolito Desideri's *Historical Notes on Tibet*.

14.5 The researcher/s' latest 2x2 photo shall be placed at the center of the page two spaces after the title.

VII. Conducting Oral Defense

Every oral defense shall have the parts as given below.

I.	Opening Prayer	Candidate
II.	Greetings and Introductions	
	Greetings	Panel on Oral
		Examination (POE) Chair
	Introduction of the Candidate	Research Adviser
	Introduction of the Panel on	
	Oral Examination	POE Chair
	Introduction of POE Members	POE Chair
III.	Announcement of the Rating	
	System	POE Chair
IV.	Oral Examination Proper	
	Brief Presentation of the Study	Candidate
	Question-and-Answer Phase	
	(General to specific questions)	Panel on Oral Examination,
		Candidate and Adviser
	(Recommendations/	
	Suggestions to improve	
	the study)	Panel on Oral Examination
V.	Concluding Remarks	POE Chair
VI.	Deliberation (Candidate and	
	guests leave the room)	POE Chair
VII.	Announcement of Results	POE Chair

VIII. Grading System

For Undergraduate Thesis

Percentage	Numerical	Descriptive
Range	Rating	Rating
97-100	1.00	Outstanding
94-96	1.25	Outstanding
91-93	1.50	Very Good
88-90	1.75	Very Good
85-87	2.22	Good
82-84	2.25	Good
79-81	2.50	Satisfactory
76-78	2.75	Satisfactory
75	3.00	Passing
65-74	5.00	Failure

For Master's Thesis

Range	Rating	Rating
97-100	1.00	Outstanding
94-96	1.25	Very Good
91-93	1.50	Good
88-90	1.75	Fair
85-87	2.22	Passed
Below 85	-0-	Failed
No Grade	-0-	Deferred

For Doctoral Dissertation

Percentage	Numerical	Descriptive
Range	Rating	Rating
97-100	1.00	Outstanding
94-96	1.25	Very Good
91-93	1.50	Good
88-90	1.75	Passed
Below 88	-0-	Failed
No Grade	-0-	Deferred

For Master's Thesis and Doctoral Dissertation, the POE shall use an evaluation sheet with the following criteria (see Appendix 8: Oral Defense Evaluation Sheet).

	Criteria	Weight
I.	 Thesis/Dissertation Defense Presentation	20%
	 Ability to answer questions Mastery of the topic 	40%
II.	Manuscript	
	 Contribution to the field of specialization/ discipline (theory testing for thesis/theory building for dissertation; applicability) 	10%
	 Substance and Content (logical organization, accuracy of the research process, Accuracy and relevance of works cited depth of discussion) 	20%
	 Form and Writing Style (use of GS format; proper application of rules of style and grammar, scholarly language) 	10%
	Total Final Rating	100%

IX. Statistical and Editorial Consulting

The researcher/s shall be expected to ensure appropriateness of the statistical treatment used in the manuscript. He may seek the assistance of the University's Institute for Data and Statistical Analysis (IDSA) or consult research and statistical experts within and outside the University in case he himself performs the data/statistical analysis.

The editing of the manuscript is a requirement to check for grammatical and mechanical errors. A certification from a professional editor that the manuscript has been thoroughly edited shall be included in the Appendices.

X. Required Number of Final Copies

The researcher/s shall be required to submit five (5) copies of the thesis/dissertation to the Office of the Dean. The copies shall be distributed to the following: National Library, Graduate School/College Library, and the PUP NALLRC (main library).

Each copy shall contain a Copyright Page placed before the Title Page, indicating that the thesis/dissertation has been copyrighted by the National Library and that it is available for use by researchers or end users.

XI. Binding Specifications and Submission of Manuscripts

The color of the cover of all hardbound theses/dissertations shall be **maroon**.

The spine shall contain the name of the researcher (surname followed by initials of the first and middle names), the full research title, the PUP initials, and the year of completion. The bar/s on the spine shall determine the level of thesis/dissertation—one (1) for undergraduate, two (2) for master's, and three (3) for doctoral. (See Appendix 15 for sample.)

The researcher/s shall also be required to submit two (2) soft copies of the thesis/ dissertation (CD labeled on the case with the title of research and name of researcher). The Dean shall set the deadline for the submission of the final copies for graduate programs. Diplomas, transcripts of records, certifications, and any other pertinent academic documents shall be released only to graduates who have complied with these academic requirements.

XII. Application for Copyright

Below is the approved guidelines for copyright application.

- **Step 1:** Secure the Application Form from the Intellectual Property Management Office (IPMO) at S-424, main campus, or the Innovation and Technology Support Office (ITSO) at S-423. The forms may also be downloaded from the PUP website via IPMO link. Note that the application for copyright registration of science, engineering and information technology works shall be handled by ITSO. All the rest shall be coursed through the IPMO.
- **Step 2:** Fill out the Application Form. For theses/dissertations and other works authored by student/s and submitted to PUP in partial fulfillment of the requirements of a course/program, the University must be named as copyright co-owner. The author/s must accomplish/sign the Affidavit on Copyright Co-ownership with the Polytechnic University of the Philippines. The template of the Affidavit is also available at the PUP website.
- **Step 3:** Have the accomplished Application Form and Affidavit on Copyright Coownership duly notarized.
 - **Step 4:** Proceed to the Accounting Office for the Order of Payment.
- **Step 5:** Pay the copyright application fee (Code No. 439-610) at the Cashier's Office.
- **Step 6:** Submit the following to IPMO/ITSO: **triplicate (3)** copies of the notarized forms/affidavits, **Triplicate (3)** copies of the document/s (preferably soft copies, CDs with CD case and PUP label) for copyright registration, and the official receipt from PUP.
- **Step 7:** IPMO/ITSO shall acknowledge the submission, and advise the author/s to return on a specified date for the Certificate of Copyright Registration to be issued by the National Library of the Philippines.

References

American Psychological Association. (2010). Publication manual of the American Psychological Association (6th ed.). Washington DC: American Psychological Association

Graduate School. (2007). Policy manual on thesis and dissertation. Sta. Mesa, Manila: Polytechnic University of the Philippines.

www.collab.itc.virginia.edu

APPENDICES

Appendix 1

UNIVERSITY RESEARCH AGENDA

As a state university with the largest number of enrollees belonging to the marginalized sector of society, the research program of the Polytechnic University of the Philippines (PUP) is directed at social capital and innovation towards inclusive growth for national development. Research in the university, being the primary source of new knowledge and a laboratory of highly competent and skilled human capital, is an incubator of innovations and technologies with the end goal of economic growth of the country and the community.

The focus of the research program of the University is multi-, inter and transdisciplinary and collaborative in nature, with emphasis on sustainable development, answering especially questions such as "what kind of research is done?", 'what are the objectives?", and 'what impact will the research have?" The University's research program is complimentary to research and development (R&D), technology transfer, innovation and commercialization activities.

Research Policy Statement

Research is one of the major functions of higher educations. Thus, the University encourages its faculty members, non-teaching personnel and students to be actively engaged in research undertakings to ensure the continued growth and development of PUP as a higher education institution.

Research Principles

Research undertakings in the University shall be guided by the following general principles set by the Higher Education Research Agenda-2 (NHERA-2) of the Commission on Higher Education (CHED):

- Research is the ultimate expression of an individual's innovative and creative powers. PUP shall ensure that the academic environment nurtures and supports research talents.
- Research thrives in an environment characterized by free flow information, honest and analytical exchange of ideas, and supportive policy and administrative structures. PUP policies shall enhance the institution's and the individual's capacity to conduct independent, collaborative and productive research.
- 3. Research is one of the functions of higher education sector. PUP is expected to lead the conduct of disciplined-based, policy-based, technology-based

and innovative/creative researches that are locally responsive and globally competitive.

'University Research' Defined

Research is defined as a structured inquiry that utilizes acceptable scientific methodology to solve problems and creates knowledge that is generally applicable" (Grinnell, 1993).

University research must advance the University Research Agenda of bridging the gaps in the programmed body of knowledge that the university is building up. Researchers can be initiated and conducted the following:

- an individual faculty member;
- an individual non-teaching personnel;
- a group of faculty members belonging to one department/college/branch;
- a group of non-teaching personnel belonging to the same office;
- a group of faculty members and/or non-teaching personnel from different departments/colleges/branches/campuses/offices;
- an academic department;
- a college/branch/campus;
- a student or a group of students belonging to one department, college or branch/ campus.

Only those researches that fit the definition of university research and approved by the University Research Evaluation Committee (UREC) can avail of material, technical and/or financial support from the University.

The University Research Vision, Mission and Objectives

Vision

The University envisions itself as a premier center of research in social capital and innovation towards inclusive growth for national development.

Mission

Research and development in PUP shall contribute to the transformation of the University as an epistemic community and a research-intensive polytechnic university, and in advancing knowledge across multidisciplinary areas to address the immediate and long-range needs of society. The R & D in the University shall endeavor the produce research and innovation that promote educational, technological, economic, political, ecological, social, and cultural understanding toward the alleviation of the plight of the poor, the development of the citizenry, and the enhancement of nation-building and global competiveness.

In particular, the research sector shall play a significant role in the realization of the University's envisioned society' of (1) sustainable human development; (2) democratic and good governance; (3) respect for cultural diversity and strengthened national identity; (4) technology with human touch; and (5) ecological harmony.

Objectives

To fulfill this mission, the Office of the Vice President for Research, Extension, Planning and Development (OVPREPD) shall endeavor to achieve the following objectives:

- 1. To contribute to the country's national development through a focused-university research program;
- To promote synergy and a sound research capability program through a collaboration of the research and academic sectors of the University;
- To pursue excellence in production and publication of research and creative works among faculty and students;
- 4. To develop strong research linkages and partnerships with other national and international institutions and organizations;
- 5. To pursue excellence in innovation, technology transfer and commercialization of research outputs with the end goal of economic, environmental and social growth.

The University Research Agenda

The University adopts a clear, practical, and realizable University Research Agenda that is meant to (1) be aligned with the strategic plan of the University; (2) unify the direction and framework of the research activities of the University; (3) align the research efforts of the University with the thrust and priorities of national government agencies e.g. Department of Science and Technology (DOST), National Economic and Development Authority (NEDA), Commission on Higher Education (CHED), among others; and (4) generates researches, scientific, social, cultural and technological development'.

The University Research Agenda is categorized into five general themes, to wit: (1) poverty reduction peace and security; (2) accelerating infrastructure development through science and technology; (3) competitive industry and entrepreneurship; (4) social and cultural development; and (5) conservation, protection and rehabilitation of the environment towards sustainable development.¹

Each of these themes could be dealt with independent from the others. Each could be likewise be tackled by a particular or a specific research or academic unit/center. However, the possibility of these them sot overlap and interlock with each other is not likely but necessary and at times encouraged. Thus various research units/centers and academic units can collaboratively work on a single theme and, conversely, several themes could be worked on by a single or academic unit

Agenda 1: Poverty Reduction, Peace and Security

This research theme addresses three important national and global issues that mankind is squarely faced; poverty, peace and security. The University is in the belief that these issues are interrelated—solving one means of solving others.

A. Poverty Reduction Studies

The University works with the paradigm that the poverty issue is multi-dimensional and is driven by multifarious causes. Poverty studies therefore should cover the many facets of the causes and effects of poverty as well as the ways of addressing them. They should also be linked with peace and security concerns of localities, regions and countries. The studies should reveal the relationships of poverty to security, human rights, governance, lack of education, and limited access to social services for according to Kofi Annan, 'development cannot be enjoyed without security and security cannot be enjoyed without development."

Roles and models on local resource and local actors' mobilization, increasing productivity and creativity, community-driven development, and development partnerships between public and private sector should likewise be included among the focus of poverty studies.

The following research topics are herein identified for poverty reduction according to different dimensions:

(1) Economic Dimension

- a. Agrarian reform and industrialization,
- b. Agri-business,
- c. Corporate social responsibility,
- d. Employment and industrial relations,
- e. Growth and equity
- f. Local/community and distributive economics,
- g. Micro-finance/ micro-lending strategies,
- h. National and local economic policies,
- i. SMEs, cooperative and social enterprise,
- j. Supply chain management, and
- k. Other related topics.

(2) Educational Dimension

- a. Academe-industry linkages,
- b. Alternative learning system,
- c. Curriculum development,

- d. Distance education/learning,
- e. Educational policies and legislation,
- f. Educational technology and innovation
- g. Graduate tracer studies,
- h. Home-School-Community collaboration,
- i. Institutional development
- i. Outcome-based education
- k. Professional development and faculty support,
- I. Quality assurance,
- m. Student support services,
- n. Teacher and student achievements,
- o. Transformation education.
- p. Transnational education (ASEAN integration,) and
- q. Other related topics.

(3) Social, Political and Cultural Dimension

- a. Good governance,
- b. Human development and social protection,
- c. Informal settlers.
- d. Knowledge and belief system,
- e. Local government studies,
- f. Public personnel management and development,
- g. Public-private partnership,
- h. Quality of life,
- i. Social welfare, and
- j. Other related topics.

(4) Social, Political and Cultural Dimension

- a. Food sufficiency,
- b. Food productivity,
- c. Nutrition and dietetics,
- d. Food science, and
- e. Other related topics.

B. Peace and Security Studies

Peace and security studies researches are expected (1) to understand the causes of armed conflicts, religious disagreements, cultural clashes, war, terrorism, genocide, human rights violations and others; (2) to develop ways and devices to prevent and resolve identified peace and security problems; and, ultimately, (3) to build peaceful and just communities, system, and societies.

Obviously, these types of studies require interdisciplinary approaches and expertise. Henceforth, researches with the following topics could meet the above expectations:

- (1) Understand the causes of armed conflicts, religious disagreements, cultural clashes, war, terrorism, genocide, human rights violations and others with focus or emphasis on:
 - a. Democratization,
 - b. Ethnographic and ethnicity studies,
 - c. Human growth and development,
 - d. International relations and trans-border issues,
 - e. Internationalization.
 - f. Knowledge and belief systems,
 - g. Macroeconomics and globalization issues,
 - h. Migration,
 - i. National and human security,
 - j. Policy studies,
 - k. Political dynamics,
 - I. Religion and philosophy,
 - m. Social issues.
 - n. Social movements.
 - o. World politics, and
 - p. Other related topics.

(2) Develop ways to prevent and address identified peace and security problems, through conduct of studies:

- a. Behavioral and psychosocial researches,
- b. Cross-cultural communication.
- c. Ethno-linguistics,
- d. Organizational and development communication,
- e. Peace and conflict resolution.
- f. Psycho-trauma and crisis intervention,
- g. Translation studies, and
- h. Other related topics.

(3) Build peaceful and just communities, systems and societies, exploring:

- a. Access, equity and ethics,
- b. Community empowerment,
- c. Different-abled (PWDs),
- d. Gender and development studies,
- e. Globalization of education and cross cultural aspects,
- f. Institutional development,
- g. Lesbian, Gay and Bisexual, Transsexual and Queer (LGBTQ) issues,
- h. Marriage and family,
- i. Senior citizens' issues.
- j. Women and children, and
- k. Other related topics.

Agenda 2: Accelerating Infrastructure Development through Science and Technology

Consistent with National Government's thrust, the University is determined to effect significant economic growth, human development and social protection through acceleration of infrastructure development.

Undoubtedly, infrastructure development is one of the major priorities of the national government as it is clearly and concretely outlined in the recent National Economic and Development Authority agenda. The University, in support to the government's effort, provides the country with research-based studies and scientific and engineering innovations that will enable both the government and private sectors to hasten infrastructure development which can be both hard and soft infrastructures.

The "hard" infrastructure refers to the large physical networks necessary for the functioning of modern industrial nation; these are meant to support the drivers of economic growth such as tourism, agricultural and industry. On the other hand, "soft" infrastructure refers to all the institutions or systems which are required to maintain the economic, cultural and social standards of a country; these are meant to provide the necessary services for human development and social protection, such as education, health, among others.

The University identified the following areas and topics to concentrate on:

A. Hard Infrastructures

- a. Energy-related infrastructure and facilities (e.g. power sources, upgrade of existing power plants, etc.)
- b. Flood control management,
- c. Irrigation systems.
- d. Mechatronics,
- e. Resettlement frameworks.
- f. Structural engineering,
- g. Transportation technology,
- h. Urban and rural housing,
- i. Urban gardening,
- j. Water supply and treatment facilities, and
- k. Other related topics.

B. Soft Infrastructures

- a. Bioinformatics.
- b. Computational and theoretical science,
- c. Data engineering and ubiquitous computing,
- d. E-governance,
- e. Instrumental research,

- f. Internet and Web application development,
- g. Knowledge and management,
- h. Management information systems/reporting systems,
- i. Material science research,
- j. Mathematical and statistical modeling,
- k. Mobile computing systems,
- I. Natural products,
- m. Network security and issues,
- n. Pure and applied mathematics research,
- o. Software development and applications, and
- p. Other related topics.

Agenda 3: Competitive Industry and Entrepreneurship

The University recognizes the country's need to strengthen the competitiveness of its industries, particularly those which are driving the nation forward in terms of economic growth such as tourism, agriculture, skilled manpower in ICT and language proficiency, retail, exports, investments, banking and entrepreneurship.

Furthermore, PUP is one with the National Government and its objective assuring rapid and sustained growth for the country. In view of this, the University, with its various academic and research arms, identifies important research topics and areas which can be explored (1) to reveal important trends, issues and challenges confronting these industries and (2) to discover devices and ways to address these challenges. The following research topics are hereunder identified:

- a. Business processing and outsourcing,
- b. Cooperative management,
- c. E-commerce.
- d. Human resource management practices and issues.
- e. Incubation and commercialization,
- f. Industry needs analysis,
- g. Investments and banking systems and operations,
- h. Livelihood and business development,
- i. Management and organization,
- j. Market for agriculture industry,
- k. Micro and macroeconomics,
- I. National and local economic policy research (NEDA, LGU projects, DTI),
- m. Product development and innovation
- n. Quality management,
- o. Resource management,
- p. Small and medium enterprises (SMEs)
- q. Work values, and
- r. Other related topics.

Agenda 4: Social and Cultural Development

Culture and society are linked to each other. Generally, culture is an important element of social development. The University, with its strong academic/research centers and institutes pertaining to cultural and social studies, is bent to support the National Government in the (1) creation of intellectual potential; (2) building of human capital; (3) popularization of culture, arts and heritage; (4) forging social integration; (5) promotion of national identity through local and national historiography; (6) prevention of social pathologies; (7) initiation and establishment of cooperation; (8) advancement and promotion of national solidarity and patrimony; and (9) reduction of disproportions of personal development of citizens as a form of social advancement.

The following research topics are identified in order to direct the University research activities along the line of cultural and social development.

- a. Communication and society,
- b. Filipino worldview,
- c. Filipino culture,
- d. Heritage studies/ intangible cultural heritage/ heritage preservations,
- e. Historiography,
- f. Human growth and development studies,
- g. Information campaign and evaluation, advertising/ public relations and principles and case studies,
- h. Literature, performing arts, visual arts, folk arts,
- i. Media laws and ethics,
- j. Media literacy,
- k. Organizational behavior, multiple intelligences, giftedness and learning disabilities.
- I. philosophical studies;
- m. Popular culture,
- n. Psychology and society.
- o. Sociological studies, and
- p. Other related topics.

Agenda 5: Environmental Conservation, Protection, and Rehabilitation towards Sustainable Development

Conservation, protection, and rehabilitation of the environment is a significant factor in the maintenance of community's sustainability. It includes use and management of the natural resources such as water, natural energy, air, wildlife and minerals. The University recognizes this as a very important element of national development.

APPENDICES

The following research areas and topics have been identified to generate knowledge to supplement the existing body of works regarding the management, care, use and exploitation of natural resources;

- a. Biodiversity,
- b. Climate change and mitigation and adaptation,
- c. Disaster management, preparedness and monitoring,
- d. Energy conservation,
- e. Environmental conservation, preservation, protection and stewardship
- f. Global warming
- g. Urban ecology, and
- h. Other Related topics.

FUNCTIONS OF THE THESIS-/ DISSERTATION-EVALUATION COMMITTEE

The Thesis-/Dissertation-Evaluation Committee shall be composed of the thesis/dissertation adviser as chairperson and two evaluators (one of whom is an expert in research methodology and the other, an authority in the area of study).

Upon the appointment of the adviser and the evaluators to the committee, they shall be expected to do the following:

- 1. Guide the advisee in the evaluation of the thesis/dissertation problem to ensure that the problem selected shall be:
 - 1.1 A contribution to the body of knowledge in his area of specialization and as much as possible relevant to local and national needs;
 - 1.2 Within the level of the degree sought; and
 - 1.3 Within the advisee's area of expertise.
- 2. Guide the advisee in the preparation of the thesis/dissertation proposal to ensure the following:
 - 2.1 Comprehensiveness and depth in the treatment of the problem;
 - 2.2 Correct observance of the technical aspect of proposal writing with reference to:
 - 2.2.1 research objectives,
 - 2.2.2 research hypothesis,
 - 2.2.3 theoretical framework,
 - 2.2.4 conceptual framework,
 - 2.2.5 sampling procedure,
 - 2.2.6 data-collection procedure, and
 - 2.2.7 data/statistical analysis procedure; and
 - 2.3 Proper preparation of an appropriate research instrument or correct selection of a standardized instrument.
- 3. Guide the advisee in the preparation of the thesis/dissertation to ensure that proper procedures are followed in the:
 - 3.1 Pilot testing and/or revision of the research instrument,
 - 3.2 Identification of respondents/samples,
 - 3.3 Determination of sample size and sampling techniques,
 - 3.4 Collection of data.

- 3.5 Tabulation and analysis of data,
- 3.6 Writing of the paper,
- 3.7 Acknowledgment of authorities used, and
- 3.8 Format and style of the paper.
- 4. Review the prepared thesis/dissertation for:
 - 4.1 logical, orderly, clear exposition of ideas following the framework of specific statements of the problem and objectives;
 - 4.2 objectivity, accuracy, and simplicity in the presentation of factual information;
 - 4.3 correctness and objectivity in the analysis and interpretation of facts, in the drawing of implications and inferences;
 - 4.4. completeness of data, absence of unnecessary data;
 - 4.5 formulation of conclusions based on findings; and
 - 4.6 drawing of recommendations from conclusions.
- 5. Recommend the readiness of the advisee for oral examination; advise the advisee of requirements for oral examination, like the appropriate number of bound copies of thesis/dissertation for the panel members and the Graduate School Office; give moral support and guidance to advise during the oral defense of the thesis/dissertation.
- 6. Recommend to the dean the members of the oral defense committee in consultation with the Program Chairperson.

PROPOSAL PRESENTATION EVALUATION REPORT



PROPOSAL PRESENTATION EVALUATION REPORT Researcher: Degree Program: Title: Thesis/Dissertation Committee: COMMENTS/SUGGESTIONS/RECOMMENDATIONS: Background of the Study: Theoretical/Conceptual Framework: Statement of the Problem: Related Literature and Studies: Research Design/Methodology. Research Instrument/Questionnaire: Others General Observations (for approval/disapproval): (Pls. attach additional sheet when needed). Action Taken: __ Approved __ Approved with further revisions __ Disapproved Adviser/Evaluator's Signature over Printed Name

"THE COUNTRY'S 1ST POLYTECHNICU"

PROPOSAL ACCEPTANCE AND APPROVAL FORM



PROPOSAL ACCEPTANCE AND APPROVAL FORM

Author's Name		Program of Study	
Thesis Title		PROPOSAL Defense Schedule	
Upon review of t Examination Com manuscript Thus, the prescribed peri	Review and Accepta he secretary and the adviser, the mittee during the the Committee has APPROVED to cd.	recommendations mad	le by the Ora corated in the ing data within
Reviewed and Endorsed by:	Secretary	Date	
	Thesis Adviser	Date	
4	Chair	Date	
Approved by the ORAL EXAMINATION COMMITTEE:	Member	Date	
	Member	Date	
	Open University Executive Director/Graduate School Dean/	Date	

^{**}attachment: Minutes of the Defense, Revised Paper and Instrument

"THE COUNTRY'S 1STPOLYTECHNICU"



PROPOSAL ACCEPTANCE AND APPROVAL FORM

(FOR DISSERTATION)

Author's Name		Program of Study	
Dissertation Title		PROPOSAL Defense Schedule	
Upon review of t Examination Com manuscript Thus, prescribed period.	Review and Accepta the secretary and the adviser, the mittee during the the Committee has APPROVED the	recommendations ma	ade by the Oral porated in the data within the
Reviewed and Endorsed by:	Secretary	Date	
	Dissertation Adviser	Date	
. "	Chair	Date	
Approved by the	Member	Date	
ORAL EXAMINATION	Member	Date	
COMMITTEE	Member	Date	
	Open University Executive Director/Graduate School Dean / College of Education Dean	Date	

[&]quot;THE COUNTRY'S 1STPOLYTECHNICU"

PRE-ORAL PRESENTATION REPORT



PRE-ORAL PRESENTATION REPORT

PRE-ORAL PRESENTATION REPORT
Researcher:
Degree Program:
Title:
Thesis/Dissertation Committee:
COMMENTS/SUGGESTIONS/RECOMMENDATIONS:
Title:
Preliminaries:
Chapter 1:
Chapter 2:
Chapter 3:
Chapter 4:
Chapter 5:
Bibliography/Others:
General Observations (for approval/disapproval):
(Pls. attach additional sheet when needed).
Action Taken:ApprovedApproved with further revisionsDisapproved
Adviser/Evaluator's Signature over Printed Name
"THE COUNTRY'S 1ST POLYTECHNICU"

FINAL THESIS PRESENTATION AND DEFENSE APPROVAL FORM



FINAL THESIS PRESENTATION AND DEFENSE APPROVAL FORM (to be given after the PRE-ORAL Defense)

Author's Name	Program of Study	
Thesis Title	PRE-ORAL Defense Schedule	

Review and Acceptance

Upon review of the secretary and the adviser, the recommendations made by the Oral Examination Committee during the PRE-ORAL DEFENSE were incorporated in the manuscript. Thus, the Committee has APPROVED the thesis for FINAL PRESENTATION AND DEFENSE.

Reviewed and Endorsed by:	Secretary	Date	
	Thesis Adviser	Date	
4	Chair	Date	
Approved by the ORAL	Member	Date	
EXAMINATION COMMITTEE:	Member	Date	
	Executive Director , Open University / Dean, Graduate School/Dean, College of Education	Date	

^{**}attachment: Minutes of the Defense and the Revised Paper

"THE COUNTRY'S 1ST POLYTECHNICU"



FINAL DISSERTATION PRESENTATION AND DEFENSE APPROVAL FORM (to be given after the PRE-ORAL Defense)

Author's Name	Program of Study	
Dissertation Title	PRE-ORAL Defense Schedule	

Review and Acceptance

Upon review of the secretary and the adviser, the recommendations made by the Oral Examination Committee during the PRE-ORAL DEFENSE were incorporated in the manuscript. Thus, the Committee has APPROVED the thesis for FINAL PRESENTATION AND DEFENSE.

Reviewed and Endorsed by:	Secretary	Date	
	Dissertation Adviser	Date	
. " .	Chair	Date	
Approved by the	Member	Date	
ORAL EXAMINATION	Member	Date	
COMMITTEE:	Member	Date	
	Member	Date	
	Open University Executive Director / Graduate School Dean / College of Education Dean	Date	

^{**}attachment: Minutes of the Defense and the Revised Paper

"THE COUNTRY'S 1STPOLYTECHNICU"

FUNCTIONS OF THE PANEL ON ORAL EXAMINATION

The members of the Panel on Oral Examination are expected to evaluate the ability of the master's/doctoral candidate to present the summary of his paper and to answer questions relevant to his thesis/dissertation. In general, the members are expected to find out the breadth and depth of knowledge of the examinee regarding his thesis/dissertation project. Specifically, they are expected to probe on:

- 1. The justification behind the choice of the problem, objectives, and methodologies used (data-collection procedure, sampling procedure, data/statistical analysis procedure);
- 2. The relationship between aspects of related literature and studies and the research project under examination;
- 3. Whether specific objectives are answered in the findings and conclusions;
- 4. Whether findings are within the scope of the problem;
- Whether analyses, implications, and conclusions are done objectively in an indepth and logical manner;
- 6. Whether recommendations are drawn from findings and conclusions;
- 7. Whether the form and the writing style follow the prescribed format of the PUP Graduate School; and
- 8. Whether the research contributes to the testing and building of theories or knowledge in the discipline.

ORAL DEFENSE EVALUATION SHEET



Republic of the Philippines
POLYTECHNIC UNIVERSITY OF THE PHILIPPINES
Mabini Campus, Sta. Mesa, Manila

ORAL DEFENSE EVALUATION SHEET

	Criteria	Weight
I.	Thesis/Dissertation Defense	
	Presentation (20%)	
	Style of presentation	
	Oral articulation	
	Ability to answer questions (40%)	
	Mastery of the topic	
II.	Manuscript	
	Contribution to the field of specialization/	
	Discipline—theory testing for thesis/theory	
	building for dissertation, applicability (10%)	
	Substance and Content—logical	
	organization, accuracy of the research	
	process, Accuracy and relevance of works	
	cited depth of discussion (20%)	
	Form and Writing Style—use of GS format;	
	proper application of rules of style and	
	grammar, scholarly language (10%)	
	Total = 100%	
_		
	Final Rating	

"THE COUNTRY'S 1ST POLYTECHNICU"

COVER PAGE FORMAT

(Space between the first line of the title and the top edge of the cover shall be 6 inches)

THESIS/DISSERTATION TITLE

(Typewritten in inverted pyramid style, 14-point, Arial and ALL CAPS)

(8 spaces)

Polytechnic University of the Philippines Graduate School

(10 single spaces)

NAME (2 spaces) Degree Program

(8 spaces)

Year of Graduation

(Note: All entries shall be typewritten in 14-point Arial font and in a bold face. Only the title of the thesis/dissertation and the name of the researcher shall be written in ALL CAPS.)

TITLE PAGE FORMAT

(First line of the title of thesis/dissertation must be typed 6 spaces from the paper's top margin.)

THESIS/DISSERTATION TITLE (Typewritten in inverted pyramid style, 14-point, Arial, and ALL CAPS)

(6 spaces)

A Dissertation
Presented to the Faculty of the Graduate School
Polytechnic University of the Philippines
Sta. Mesa, Manila

(6 spaces)

In Partial Fulfilment of the Requirements for the Degree Doctor in/Master in _____

(8 spaces)

by

(4 spaces)

Name of Researcher (bold face)
(2 spaces)
Month and Year of Graduation

(Note: Except for the Title, all entries shall be typed using 12-point font)

COPYRIGHT PAGE FORMAT

Philippine Copyright 2007 by the Author and the <Institution/College Represented> Polytechnic University of the Philippines

All rights reserved. Portions of this manuscript may be reproduced with proper referencing and due acknowledgment of the author.

CERTIFICATION-AND-APPROVAL FORMAT

(Type triple-spaced from the top margin, centered, boldfaced, and in ALL CAPS the heading **CERTIFICATION**)

CERTIFICATION

This thesis/dissertation, TITLE OF DISSERTATION / THESIS (IN ALL CAPS, ITALICIZED, AND IN BOLD FACE) prepared and submitted by NAME OF RESEARCHER in partial fulfilment of the requirements for the degree, STATE COMPLETE NAME OF PROGRAM has been examined and recommended for Oral Examination.

Evaluation Committee						
NAME OF ADVISER, Ph.D. Adviser						
NAME OF EVALUATOR, PhD Member	NAME OF EVALUATOR, DBA Member					
NAME OF EVALUAT Member						
APPROVAL						
Approved by the Panel on Oral Examination on (d	ate of oral defense) with the grade of					
NAME OF PANEL CHAIR, Ph.D. Chair						
NAME OF PANEL MEMBER, Ph.D. NAME OF PANEL MEMBER, DBA Member Member						
NAME OF PANEL MEMBER, Ph.D. Member	NAME OF PANEL MEMBER, DBA Member					
Accepted in partial fulfilment of the requirements for the degree Doctor in Business Administration.						
NAME OF THE DEAN, DPA Dean						
Date of passing the Comprehensive Examinations:	(If applicable)					

CERTIFICATION OF ORIGINALITY FORMAT

(Type triple-spaced from the top margin, centered, boldfaced, and in ALL CAPS the heading **CERTIFICATION OF ORIGINALITY**.)

CERTIFICATION OF ORIGINALITY

This is to certify that the research work presented in this thesis/ dissertation, COMPLETE TITLE OF THE THESIS/ DISSERTATION for the degree (Degree Program) at the Polytechnic University of the Philippines embodies the result of original and scholarly work carried out by the undersigned. This dissertation does not contain words or ideas taken from published sources or written works that have been accepted as basis for the award of a degree from any other higher education institution, except where proper referencing and acknowledgment were made.

(Signature)

NAME OF RESEARCHER

Researcher

Date Signed (date, month, year)

ABSTRACT FORMAT

(Type triple-spaced from the top margin, centered, boldfaced, and in ALL CAPS the heading **ABSTRACT**.)

ABSTRACT

Title : Title of Thesis / Dissertation

Researcher : Name of Researcher

Degree : Complete Name of Degree

Institution : Polytechnic University of the Philippines

Year : Year Graduated Adviser : Name of Adviser

(Note: Abstract should be double-spaced, and not more than 250 words.)

Keywords: (At least five (5) keywords must be given)

SPINE FORMAT and COLOR

Spine format: The number of bars on the spine represents the level of program—one for the undergraduate, two for master's, and three for doctoral.

Color: Maroon for all programs in the undergraduate, Open University, and Graduate School

SPINE UNDERGRADUATE DISSERTATION **MASTER'S THESIS** PROGRAM PROGRAM **PROGRAM** ĦE AUTHOR YEAR YEAR YEAR FRONT COVER Title Name of School Name of Student (Author)

Year

COMMITTEE ON THE DEVELOPMENT OF THE UNIVERSITY THESIS AND DISSERTATION MANUAL

Chair : Dr. Joseph Mercado **Co-Chair :** Dr. Racidon P. Bernarte

Members:

AVPAA Edelyn M. Mariano

Dr. Carmencita L. Castolo

Dr. Anna Ruby P. Gapasin

Dr. Marissa B. Ferrer

Prof. Armin S. Coronado

Dean Guillermo O. Bernabe

Dr. Ma. Junithesmer D. Rosales

Dr. Dennis O. Dumrique

Dr. Desserie T. Maynes

Prof. Michael B. Dela Fuente

Prof. John Patrick B. Sta. Maria

Prof. Rogelio G. Dizon

Prof. Antonio N. Alcantara

Prof. Jeffrey L. Bartilet

Secretariat:

Dr. Silvia C. Ambag

Prof. Joseph Reylan B. Viray

Prof. Emejidio C. Gepila, Jr.

Prof. Christine A. Del Rosario

