



# **Formatting Guidelines**

## **Undergraduate Theses in the Department of Mathematics and Statistics**

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## Table of Contents

General Information.....	2
Number of Copies – Prior to Grading .....	3
Number of Copies - After the Thesis Presentation.....	3
Thesis Format.....	3
Preliminary Pages .....	3
1. Title Page.....	3
2. Approval Page .....	4
3. Abstract .....	4
4. Table of Contents .....	4
5. List of Tables .....	4
6. List of Figures .....	4
7. Glossary.....	4
8. Acknowledgement and Dedication .....	4
Text.....	4
Notes.....	4
Specifications.....	6
Duplicating and Reducing Charts, Graphs, Figures and Tables.....	6
Facing Pages .....	6
Font Size and Type .....	6
Forms To Be Completed.....	6
UNBC Partial Copyright Licence Form.....	6
Binding Instructions for Thesis Form .....	6
Illustrative Material .....	7
Infringement of Copyright.....	7
Margins.....	7
Non-Print Media .....	7
Pagination .....	7
Paper .....	8
Patentable Materials .....	8
Printouts.....	8
Prohibited.....	9
Publication of a Series of Papers as a Thesis.....	9
Quality of Type and Print .....	9
Restricted Thesis.....	9
Spacing .....	9
Style Manuals .....	9
Symbols, Accents, Etc. ....	9
Sample Title Page .....	100
Sample Table of Contents.....	111
UNBC Partial Copyright Licence Form .....	122
Binding Instructions For Theses .....	13

<b>General Information</b>
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Undergraduate theses are a contribution to knowledge. It is important that the findings be presented in a fashion to maximize their usefulness to others. If a thesis does not conform to the instruction below it will not be accepted

### **Number of Copies – Prior to Grading**

It is mandatory to provide 2 copies of your thesis on regular paper to your supervisor upon submission of the thesis for grading.

### **Number of Copies - After the Thesis Presentation**

It is mandatory to provide the following copies of your thesis to the administrative assistant of the Department of Mathematics and Statistics after you have completed your thesis presentation and have made any revisions resulting from the grading of the thesis:

- 2 copies on regular paper, shrink-wrapped individually
- 2 copies on acid-free paper, shrink-wrapped individually

If you are having more copies bound for yourself (i.e., for your supervisor, thesis examiner, family members or friends) please supply each copy shrink-wrapped individually and on whichever paper (acid-free or regular) that you want them to be bound on.

Acid-free paper is available from the UNBC Bookstore and UNBC Copy Services. If you are taking your thesis to UNBC Copy Services for copying, your original should be on regular paper. The main thing to keep in mind is that the print quality should be high throughout your documents.

Currently, the cost<sup>1</sup> to have bound copies made is \$34.00 (as of July 1, 2011) per bound copy. It is the student's responsibility to pay for all bound copies of the thesis.

The bound copies are currently done in Surrey, BC and usually take approximately three weeks to complete. This time limit can vary depending on the time of year.

<b>Thesis Format</b>
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### **Preliminary Pages**

Parts 1-4 listed below must be included in your thesis; part 5-7 only if they are appropriate; part 8 is optional. Those parts that are included must be in the order given, 1-8.

#### **1. Title Page**

The form and contents of the title page must follow the sample shown (see Page ///). All information shown on the sample – from the title to the copyright statement – is required.

Library and Archives Canada suggests that titles should

*“Use word substitutes for formulas, symbols, superscripts, Greek letters, or other non-alphabetical symbols in the title. If your title contains symbols or non-Roman letters, please suggest appropriate translations using Roman letters and provide them as keywords.”*

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<sup>1</sup> All costs referred to in this document are subject to change.

## **2. Approval Page**

The approval page will be prepared by the Office of the Department of Mathematics and Statistics and will be provided to the thesis supervisor who will ensure that the approval page is signed by the two graders (thesis supervisor and thesis examiner). The page will then be returned to the Department of Mathematics and Statistics.

The approval forms will be inserted into the final thesis copies by the Administrative Assistant, Department of Mathematics and Computer Science after the student brings their finalized shrink-wrapped thesis copies to be bound.

## **3. Abstract**

The abstract should be a summary or condensation of the thesis. It should state the problem, the methods of investigation, and provide the general conclusions.

## **4. Table of Contents**

The table of contents must include an abstract, the list of tables and/or the list of figures (if applicable), the acknowledgement as well as all the main divisions of the thesis, subdivisions, bibliography, appendix and index. Page numbers must be given. A sample table of contents is provided at the end of this booklet (see Page ///).

## **5. List of Tables**

A list of tables must include a list of table numbers, full titles, and page numbers beginning on a separate page. The tables must be numbered in Arabic numerals consecutively in order of appearance.

## **6. List of Figures**

A list of figures must include a list of figures (i.e. graphs, photographs, and other illustrative material) with full titles and page numbers beginning on a separate page. The figures must be numbered in Arabic numerals consecutively [Figure (or Fig.) 1, 2, 3 etc. or 2.1, 2.2 etc.] in order of appearance and should be captioned.

## **7. Glossary**

A glossary to clarify the meaning of technical terms may be placed prior to the acknowledgement. Glossaries are normally presented in alphabetical order.

## **8. Acknowledgement and Dedication**

Although not required, some candidates insert a brief dedication and/or acknowledgement. This must be placed at the end of the preliminary section and must be numbered and noted in the Table of Contents. The acknowledgment and dedication should not be more than one page each. Note: the "Acknowledgement" and "Dedication" heading must be used as required.

## **Text**

While not all the parts of the text listed here are required in all theses, those present are to be in the following order: introduction, main body, nomenclature, bibliography, appendices, and index.

## **Notes**

The footnotes or endnotes may be numbered consecutively throughout the thesis, or throughout each chapter. They may be at the bottom of pages, at the end of chapters, or at the end of the

main body of the text immediately preceding the bibliography. Candidates are reminded that a consistent and established style must be followed in the footnotes, endnotes and bibliography (see *Style Manuals*).

## Specifications

### **Duplicating and Reducing Charts, Graphs, Figures and Tables**

Care must be taken in both duplicating and reducing figures (charts, drawings, graphs, photographs, maps, etc.). These must not be reduced beyond easy legibility. Reduction emphasizes the faults of the original; quality is further lessened on microfiche. See *Illustrative Material*.

The Department of Mathematics and Statistics may refuse any typescript or printout that does not meet acceptable standards of quality.

### **Facing Pages**

Facing pages are not acceptable. If the caption for a figure, table, etc., cannot be arranged on the same page as its accompanying illustration, place it on a separate page, number the page in its proper sequence (one before the illustration) and present it face up.

### **Font Size and Type**

One font type and size must be used throughout the thesis document; each page must be typed on one side only. A medium-sized clear font type – e.g. New Times Roman, Palatino, Arial, or Helvetica are strongly recommended. A 12 point font size is mandatory and must be used for everything but captions and endnotes/footnotes. A 10 point font size may be used for captions and endnotes/footnotes but care must be taken to ensure that it is used consistently in all caption and endnote/footnote areas. See *Illustrative Materials*.

### **Forms To Be Completed**

The following forms, obtainable from the Office of Research and Graduate Programs (these forms are also used for graduate degree theses) are to be completed and submitted with the final copies of your thesis.

- **UNBC Partial Copyright Licence Form (GR 306)**  
A UNBC Partial Copyright Licence Form (GR 306) must be submitted with the two copies of the finished thesis on acid-free paper (see Page 14). The UNBC Partial Copyright Licence allows the UNBC Library to loan and make single copies only for Library users and other libraries without taking any rights away from the candidate. One of the bound copies of the student's thesis is kept in the Special Collection of the UNBC Library and the other bound copy is kept in the General Collection.
  
- **Binding Instructions for Thesis Form (GR 301)**  
The Binding Instructions for Thesis Form (GR 301) provides the student with information about how the finished thesis should be received by the Office of Research and Graduate Programs. It identifies the cost to the student per bound copy and clarifies the obligation of the student to pay all costs associated with the copying and binding of the finished thesis.

Title and student name for the spine of your bound copies must be limited to 150 characters including spaces and if your thesis is ½ inch thick or less you are limited to 80 characters. Your name may include initials of your first and/or middle name(s). Please remember that the name on your thesis should reflect your legal name.

## **Illustrative Material**

Illustrations, including photos, maps, graphs, tables, etc., must be on high quality paper, preferably 8 ½ x 11 inches (21.6 x 27.9 cm), and have the required margins (see *Margins*). If on larger paper, i.e., 11 x 17 inches (28 x 41 cm), they can be carefully folded so they can be inserted into the finished thesis; or they can be carefully folded and put in a folder at the back of the thesis.

Clear scanned images or high quality laser copies are required. All illustrations should have a caption. The preferred font size for a caption is 11 points; however, the font size can be as small as 10 points if necessary. Care should be taken to ensure the same font size is used for all captions throughout the thesis document.

Labels, symbols or cross-hatching should be used in place of colours to denote significant details; colours often cannot be usefully distinguished when microfilmed or photocopied. Lines on a graph should be identified by labels or symbols rather than colours. Shaded areas - such as countries on a map - will have better contrast if cross-hatching is used instead of colour.

Colour illustrations are not recommended as the colour images will lose clarity should they be microfilmed.

Construction paper, cardboard and pencil are not acceptable.

## **Infringement of Copyright**

Copying material written, drawn, or photographed by persons other than the thesis author may violate the law of copyright. Candidates must request written permission of the copyright holder(s) if the extent of copying appears to be more than the allowable “fair dealing” expressed in the Canadian Copyright Act, Section 29. Candidates are advised consult the ProQuest Information and Learning web-site: [http://www.proquest.com/assets/downloads/products/UMI\\_CopyrightGuide.pdf](http://www.proquest.com/assets/downloads/products/UMI_CopyrightGuide.pdf) for information on copyright issues. The above-mentioned web-site has a copyright sample permission letter that may be useful. Please remember that the Library and Archives Canada will not film material judged to be in violation of copyright. Students must be prepared to provide evidence that they have obtained the necessary copyright permission from the copyright owners.

## **Margins**

The margins must be at least 32 mm (about 1 ¼ inches) on the left or binding edge, and 25 mm (about 1 inch) on the three outer edges of every page.

## **Non-Print Media**

Please contact the Office of Research and Graduate Programs if you plan to submit non-print media as part of your thesis. Non-print media includes audio, video or any other electronic materials.

## **Pagination**

The preliminary pages are to be numbered in small Roman numerals (ii, iii, iv, etc.); the text is to be numbered in Arabic numerals. The title page is “i” but is not numbered; the signed approval page is placed by the Department of Mathematics and Statistics behind the title page and is not numbered or counted. Numbering begins at “ii” on the first page of the abstract. The first page of the text is “1” and the numbering continues throughout including pages with tables, figures, the bibliography, appendices and index. Every page – *other than the title page and the approval*

*page* – must be numbered. To avoid being trimmed away by the binder, the numbers should be placed at least 8mm (1/4 inch) from the edge of the page; the numbers may be placed either in the centre (top or bottom) or on the right of the page. See *Facing Pages*.

## **Paper**

High quality bond paper, 8 1/2 x 11 inches (21.6 x 27.9 cm), must be used; 20-24 pound (75-90 gm<sup>2</sup>) stock for typescripts and computer printouts. The paper stock must be white, not cream, grayish, or coloured. Erasable paper must not be used. Recycled paper must be white (not off-white). Pages with holes, such as those made by binder rings, are not acceptable.

If you are not using UNBC Copy Services to copy your final acid-free thesis copies, you must provide proof (i.e., the package label) that the paper used is acid-free paper.

## **Patentable Materials**

The University has policies and procedures on patents.

It should be noted that public disclosure, in any form, of patentable material before a formal patent application has been filed in at least one country, may comprise potential patent protection in other countries. Deposition of a thesis in the University Library constitutes such disclosure.

If it appears that the subject matter of the research to be incorporated into the thesis is likely to lead to patentable or licensable material, the matter should be discussed with the University Industry Liaison Office (UILO) as early as possible and in all cases before the intended date of depositing the thesis in the UNBC Library. While patent applications can be filed very quickly, some time is required to translate research results into a strong patent. A lead time of one or more months may make the difference between a worthless patent and one which will give you substantial financial rewards. It is best to consult with the UILO as soon as you determine that your work may have commercial potential.

## **Printouts**

One type face and one size of type throughout the thesis are preferred. A high standard, letter quality print is expected; poor print and inferior grades of paper will not be approved. If uncertain of the acceptability of print or paper, bring samples to the Department of Mathematics and Statistics before starting the final printout.



## **Prohibited**

The following items are prohibited for use in theses at the University of Northern British Columbia:

- Binding (all copies must be handed in unbound)
- Cardboard
- Construction paper
- Dot-matrix characters
- Erasable paper (under any of its various trade names)
- Holes (such as those made by binder rings)
- Letraset or like adhesive prints
- Pencil
- Rubber Cement
- Scotch Tape or like adhesive tapes

## **Quality of Type and Print**

The quality of type and print must be high and this excellence maintained throughout the thesis document. Letters should be sharp, black, unbroken, and unvarying in intensity from line to line and page to page.

## **Spacing**

The thesis copy must be double spaced except the acknowledgement, block quotations, endnotes, footnotes, captions on tables and figures, appendices, and the index; these may be single spaced. The bibliography should be single spaced but with double spacing between entries.

## **Style Manuals**

An established style must be followed consistently throughout the thesis. This is most important in footnotes, endnotes, and the bibliography. Three standard style manuals are suggested: however, this is not an all-inclusive list: The University of Chicago Press, *The Chicago Manual of Style*; The Modern Language Association of America, *MLA Handbook for Writers of Research Papers*; Kate L Turabian, *A Manual for Writers of Term Papers, Theses and Dissertations*. Use the latest editions available. Candidates should ultimately be guided by the preference of their supervisor and program.

If there is a conflict between the instructions in this booklet and those in the style manual chosen, the former are to be followed.

## **Symbols, Accents, Etc.**

Characters not available in standard typesetting programs such as Latex (e.g., those needed for mathematical equations or accenting languages) should be neatly executed by hand in black ink. Letraset or like adhesive prints must not be used.

**Sample Title Page**

*In Times New Roman (Must be 12 point font size)*

[1 line space from top margin]

**NON-COMMENSURATE BANACH SPACES:  
DEALING WITH INTRACTIBILITY (Bold, All Caps)**

[2 line spaces]

by

[2 line spaces]

**Your Legal Name (Bold)**

[1 line space]

B.Sc., University of Toledo, 2003

[11 lines spaces]

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
BACHELOR OF SCIEBCE (HONOURS)  
IN MATHEMATICS AND STATISTICS

[11 lines spaces]

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

July 2012

[2 line spaces]

© Jane Everystudent, 2012

# Sample Table of Contents

*In Times New Roman (Must be 12 point font size)*

## TABLE OF CONTENTS

Abstract		ii
Table of Contents		iv
List of Tables		vii
List of Figures		viii
Glossary		ix
Acknowledgement		x
Introduction		1
Chapter One	Non-commensurate Banach Spaces: Introduction and Overview	5
Chapter Two	Key Definitions and Consequences	38
	The Problem with Bases	46
	More Problems	48
	Even More Problems	52
	Reciprocity	56
	Invertibility of the Thorpe Transform	60
Chapter Three	Higenbottom's Solution	73
	The Ketchly Algorithm	94
	The Jordanovich Principle	99
	Numerical Approaches	132
Chapter Four	Stability	142
	Numerical	145
	Intrinsic	146
	Calculating the Arnoldsen Basis	168
	Connections with Quantum Gravity	217
	Conclusion	228
Chapter Five	Conclusions and Recommendations	235
Bibliography		242
Appendix 1	Contractual Agreement Between Parties	255

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Author \_\_\_\_\_  
Printed Name Signature Date

# BINDING INSTRUCTIONS FOR UNDERGRADUATE THESES IN MATHEMATICS AND STATISTICS

## General Instructions:

Students are responsible to cover the costs for:

- 1) Making copies of their final document onto acid-free and regular paper; and,
- 2) Having their copies hard-cover bound\*.

Students may wish to have more copies bound for their supervisor, thesis examiner, family, friends, etc. The cost of having hard-cover bound copies made is \$34.00 (as of July 1, 2011) (tax included) for theses and dissertations. It is the student's responsibility to pay for all bound copies of the thesis.

\*The administrative assistant of the Department of Mathematics and Statistics keeps the originally-signed approval pages, on acid-free paper, for insertion into the two thesis/project copies and any additional copies that you would like bound.

The Department of Mathematics and Statistics sends the paper copies out to be hard-cover bound by a company in Surrey, BC. This process normally takes approximately three-six weeks to complete. This time limit can vary depending on the time of year.

**Title and Student Name for the spine of your hard-cover bound copies must be limited to 150 characters including spaces if your thesis is more than 3/4 inches thick.**

**If your thesis/project is less 1/2 inch thick, then please make sure the title and student name are a maximum of 80 spaces.** Your name may include initials of your first and/or middle name(s). Please note that your legal name should be used.

Please state below the title and name that you wish to appear on the spine of your hard-cover bound copies:

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(150 character maximum)

## For Theses:

The Department of Mathematics and Statistics at the University of Northern British Columbia requires two copies of the finished document on acid-free paper and two copies on regular paper.

The two copies on acid-free paper will go to the UNBC Geoffrey R. Weller Library (one bound copy for the General Stacks and one bound copy for the University Archives). One regular paper copy will be sent to your thesis supervisor with the second copy for departmental records. These copies can be made from a copy of your document printed out on regular paper and taken to UNBC Copy Services at the UNBC Prince George Campus for copying onto acid-free paper.

All copies of the document must be individually shrink-wrapped (wrapped in plastic) before they are brought to the Department of Mathematics and Statistics. This prevents the corners from being damaged during shipping. You can request this service from UNBC Copy Services.

The student must also submit the UNBC Partial Copyright Licence Form (GR 306).