Thesis and Dissertation Guidelines



Revised August 2014

TABLE OF CONTENTS

INTRODUCTION	5
PROQUEST	6
RESPONSIBILITIES	7
Student Responsibility:	7
Committee Responsibility:	7
A CHRONOLOGY FOR PREPARING AND SUBMITTING YOUR DOCUMENT.	8
During the semester of your graduation:	8
Preparing Your Document	8
Submitting Your Document	9
Some Notes of Caution Regarding Deadlines	9
MFA in Creative Writing Students	10
Degree-Only Students	10
OVERALL FORMATTING	11
Margins	11
Spacing	11
Single Spacing: Double Spacing	
White Space	
Tops and Bottoms of Pages	12
Font and Point Size	
FontPoint Size	
Boldface	
Italics	13
Pagination	13
ORDER OF THE ELEMENTS	14
Front Matter	14
Body of Text	14
Back Matter	14

USING THE ELEMENTS	15
FORMATTING EACH ELEMENT	16
Front Matter	16
Title Page (Reguired)	
Dedication and Acknowledgments	
Table of Contents (Required)	
Lists of Tables, Figures, Schemes, Nomenclature, Abbreviations, etc	
Abstract (Required)	
Body of Text	17
Main (Chapter-level) Headings	
Subheadings	
Notes	
Tables and Figures	19
Photographs, Hand-Drawn Illustrations, Images, Audio, and Oversized Illustrative Materials	19
List of References	19
Dook Matter	40
Back Matter	
Appendices	
Vita (Required)	20
COPYRIGHT AND ETHICAL MATTERS	21
Copyrighting Your Document	21
Using Material That You Have Published	21
Using Material That Belongs to Others	22
Published	
Unpublished	
Using Collaborative Research	
Ethical Matters	23
FINAL THESIS CHECKLIST	24
FINAL DISSERTATION AND MONOGRAPH CHECKLIST	25
MOST FREQUENT ERRORS	
Document Errors:	26
ETD Collection Page Errors:	26
Submission Errors:	26

SAMPLE PAGES	27
[Sample Title Page: DISSERTATION]	28
[Sample Title Page: MASTER'S]	29
[Sample Table of Contents # 1]	30
[Sample Table of Contents # 2]	31
[Sample List of Tables]	32
[Sample List of Figures]	33
[Sample Bibliography]	34
[Sample Appendix]	35
[Sample Vita]	36

INTRODUCTION

The Graduate School faculty and staff hope that you will find the preparation of your thesis, dissertation, or monograph to be the high point of your education and a source of pride as the pinnacle of your advanced study at Louisiana State University. This guide will help you to correctly prepare your document for final submission on the worldwide web as part of the LSU Electronic Thesis and Dissertation Collection. This guide provides uniform standards for meeting LSU's document requirements while allowing for differences in disciplinary practices. Please review the guidelines thoroughly before you begin to write, bearing in mind that your document must be approved by The Graduate School as well as your advisory committee.

In most disciplines, the master's thesis should demonstrate a capacity for research and originality of thought. In other disciplines, notably those awarding the master of fine arts degree, the thesis should represent creativity, originality, and mastery of one's art at a professional level.

In the spring of 1991 a task force of the Council of Graduate Schools issued the following statement on the role of the dissertation and dissertation research:

The doctoral dissertation should (1) reveal the student's ability to analyze, interpret, and synthesize information; (2) demonstrate the student's knowledge of the literature relating to the project or at least acknowledge prior scholarship on which the dissertation is built; (3) describe the methods and procedures used; (4) present results in a sequential and logical manner; and (5) display the student's ability to discuss fully and coherently the meaning of the results. In the sciences, the work must be described in sufficient detail to permit an independent investigator to replicate the results.

The dissertation is the beginning of one's scholarly work, not its culmination. Dissertation research should provide students with hands-on, directed experience in the primary research methods of the discipline, and should prepare students for the type of research/scholarship that will be expected of them after they receive the Ph.D. degree.

--Excerpt from A Policy Statement: The Role and Nature of the Doctoral Dissertation

We wish you every success as you engage in your upcoming studies. The resulting document will reflect primarily on you, but it will also reflect on your advisors, department, and university. Thus The Graduate School expects you to prepare a document of exceptional quality. If you have questions not specifically addressed by these guidelines and by departmental guidelines, please contact The Graduate School's thesis and dissertation reviewers at (225-578-3181) or through e-mail to gradetd@lsu.edu.

લ લ લ લ લ લ લ લ લ લ લ

This guide was originally developed by a committee of departmental graduate advisors, members of the Graduate Council, members of the Graduate Student Association, and the staff of The Graduate School. It is reviewed regularly and revised as necessary. Similar guides from other universities and the following publications of the Council of Graduate Schools have aided the preparation of these guidelines:

- A Policy Statement: The Role and Nature of the Doctoral Dissertation
- The Doctor of Philosophy Degree
- Research Student and Supervisor: An Approach to Good Supervisory Practice

PROQUEST

LSU is currently working with ProQuest to provide students the option to publish with ProQuest, in addition to the LSU ETD site. Once this option is available, you are strongly urged to exercise this option. The ProQuest Dissertation & Theses Database (PQDT) reaches 3,000 universities with over 200 million searches annually, and supports discovery through all major subject and discipline indexes (SciFinder, MLA, MathSciNet, PsycINFO, ERIC, etc). ProQuest provides these services at no charge and is a non-exclusive distributer of your master's or doctoral thesis. You will be eligible for a royalty based upon sales of the full-text of your work in all formats. Another advantage of publishing through ProQuest in addition to the LSU Institutional Repository (etd.Isu.edu) is that this process will provide yet another archival copy which helps ensure the long-term preservation of your work.

During submission to ProQuest, you are free to select an embargo period, as with your LSU submission, though this is not recommended except for extenuating circumstances (e.g., MFA in Creative Writing students). If, for some reason, you wish to withhold your work from the ProQuest public site indefinitely, you may still submit to ProQuest, in which case you would specify during the submission process an indefinite embargo period. This will at least provide for additional archiving, while protecting your work from the public.

RESPONSIBILITIES

Student Responsibility:

It is the responsibility of each student submitting a thesis or dissertation:

- To be aware of and to adhere to all applicable US copyright laws
- To meet all published deadlines (as shown in Graduate School and University official calendars) for submission of theses and dissertations
 - O To ensure that all required documents for graduation have reached The Graduate School in a timely way:
 - Application for degree
 - Final exam approvals
 - O Provide review copies to committee members well in advance of committee meetings
- To ensure that the final document includes:
 - O All committee revisions required as a result of the final defense
 - O Committee chair approval after final revisions
 - All formatting required by The Graduate School
- To adhere to:
 - O The LSU Code of Student Conduct
 - O LSU Policies and Procedures
 - O LSU rules for Accountability and Academic Integrity
 - O IRB policies regarding research conduct
 - O All Federal policies relating to research conduct

Committee Responsibility:

It is the responsibility of the student's major professor and advisory committee to ensure:

- That a thesis, dissertation, or monograph represents an original, identifiable, and sufficient individual effort of the candidate
- That the student receives timely and constructive feedback on documents submitted for review
- That the final document represents LSU standards with regard to the conduct of research and scholarly pursuits

A CHRONOLOGY FOR PREPARING AND SUBMITTING YOUR DOCUMENT

During the semester of your graduation:

- Be aware of all pertinent deadlines for degree candidates. They are available in the Office of Graduate Student Services (Room 114, David Boyd Hall), the General Catalog, and online at www.gradschool.lsu.edu.
- Register as "degree only" if you have completed all degree requirements, including final
 examinations taken in a previous semester. Deadlines are different for students intending to
 register as "Degree Only". Please be aware of this as you review the deadlines for your final
 semester. This registration is only allowed for students whose theses or dissertations are
 submitted to and approved by The Graduate School on or before the last day to add courses for
 credit.
- Schedule your defense as early in the semester as possible. An early defense will provide you
 sufficient time to format your thesis, dissertation, or monograph for final submission according to
 these guidelines and to ascertain that all your final paperwork has been submitted to The
 Graduate School.

Preparing Your Document

Study these guidelines *early* in the semester to become aware of The Graduate School's specific requirements for formatting and submitting your document. As you begin preparing the final version of your document, refer to these guidelines for proper formatting directions. Review these requirements periodically to keep them fresh in your mind. Following the guidelines will make your document easier to read and will lend more authority to your words. The Graduate School must approve the format of your document before you can graduate.

- Submit the Examination and Thesis [or Dissertation] Report (called the "approval sheet")
 - A few days before your defense, check with your department to ensure that the title of your thesis or dissertation and the form of your name entered on the approval sheets perfectly matches the title page of your document and your official name.
 - Within the week after your defense, double check that your department has sent the approval sheets to The Graduate School. These forms must be typed with no corrections (erasures or whiteout) and signed with black or blue ink.
- Meet with a thesis/dissertation reviewer. This meeting is not required but is strongly encouraged.
 The reviewer can assist you with formatting your document prior to final submission.
 - Schedule an appointment to see a thesis and dissertation reviewer a few days before or after your defense (call 225-578-3181). Caution: Please be aware that appointments with the reviewer may not be available during the week immediately preceding the deadline for submitting your document.
 - Reviewers are located in the Office of Graduate Student Services, Room 114, David Boyd Hall. For your appointment:
 - Follow the document requirements set forth in these guidelines in preparing your document prior to your appointment.
 - Bring an unbound printout of your document—printed on one side only—to the appointment. The reviewer will point out any obvious problems remaining in the document, clarify your questions about these guidelines, and offer helpful tips on your document's final preparation.
 - Appointments with a reviewer are generally reserved for your graduation semester, although you are free to e-mail questions to gradetd@lsu.edu at any time.
- (Following your defense and your appointment with the reviewer) Incorporate the final changes required by the reviewer and your advisory committee. Give special attention to the following items as you prepare your final version:
 - o Follow the checklists beginning on page 24 in these guidelines.
 - Compare the wording and capitalization of the items listed in your Table of Contents, List
 of Figures, and List of Tables against what is actually in your text. Ensure that all
 precisely match.

- Systematically check each element against other related elements (e.g., all chapter headings, subheadings on each different level, table titles, and figure titles) for consistency in font, placement, and capitalization style.
- (Prior to uploading your document) Be certain that the Office of Graduate Student Services has the following items:
 - o Application for Degree (with Degree Only status prominently noted if applicable.)
 - o Approval sheet on acid-free paper, signed in blue or black ink.
 - Request for Restricted Access form: The request form requires a signature from you and your major professor before submission to The Graduate School. This request must reach The Graduate School prior to a reviewer's approval of your document to ensure that the restriction you seek is attached to your final document on approval.
- Complete *The Survey of Earned Doctorates*: (Required for all doctoral candidates)
 - o Doctoral candidates only: Please complete *The Survey of Earned Doctorates* by accessing the site: https://sed.norc.org/survey.

Submitting Your Document

- Upon completion of your defense and committee required document revisions, submit the Request for ETD User Name and Password.
- After receiving your credentials, log in to the ETD Collection page.
- Be aware of the following details as you fill in the information on the ETD Collection site:
 - Use your full name as shown in your university records.
 - Include alternate e-mail addresses, separated by commas. Note that your "Isu.edu" email address expires one year after graduation. Please provide a long-term email address such as gmail.com, outlook.com, etc.
 - Type the title of your document in a mixed-case font (i.e., do not use full capitalization for the title on the collection page).
 - Enter keywords to facilitate the search of your document by readers.
 - Provide the full names of your advisory committee with the last name first, followed by a comma and the first name (e.g., Smith, John). Consult the <u>LSU Graduate Faculty database</u> for full names. Also, using the drop-down box provided on the collection page, indicate the faculty member's status on your committee (i.e., chair, member, etc.). Faculty email addresses must be provided on this page.
 - Upload your document in pdf format (required) and use the following file naming protocol:
 - Thesis: your last name thesis.pdf
 - Dissertation or Monograph: your last name diss.pdf
 - Your final document must be submitted in pdf (Portable Document format) (required).
 - o Prepare your document in the software program of your choice.
 - o Print final document to pdf.
 - Check the pdf document for format consistency.
 - Load the pdf document to the ETD Collection page.
 - Please also load the Word document file if available; this will facilitate minor corrections.

Once you have loaded all portions of the document/collection page your document is available to the ETD reviewers. You will not receive any notice at this point.

The Graduate School reviewer will check your document as soon as possible and notify you by e-mail if it requires formatting corrections. If formatting edits in the document file are necessary, delete the original document pdf file from the ETD Collection website. Make required edits, and upload the corrected document. Once your document has received approved, you and your advisory committee will receive a notice via e-mail.

Some Notes of Caution Regarding Deadlines

You must upload the final version of your thesis or dissertation, which should include all
committee changes and Graduate School reviewer corrections, to the ETD Collection site by the
deadline for submitting committee-approved documents shown on The Graduate School

Calendar in the semester of your final examination. Note there are two deadline listed in the Graduate School Calendar: the first deadline is the final date for you to submit your document. The second deadline is the final date for you to make all corrections (if required) after document review

- If you are unable to meet final submission deadlines, you must update the *Application for Degree* form to reflect the semester in which you intend to graduate.
- If continued research and writing is necessary, you must register for appropriate hours of thesis or dissertation research.

MFA in Creative Writing Students

Follow the directions above for submitting an electronic document. To restrict your document from public access online, you should also submit the <u>Request for Restricted Access</u> form prior to loading your document to the ETD collection page. If you wish your thesis to be available on the shelves of the Middleton Library, provide a copy on acid-free paper by the final deadline required for document submission. The library will catalog and shelve the hard copy. The following are links to sources of Permalife acid-free paper (which is required for library documents):

- http://www.universityproducts.com
- http://talasonline.com
- http://www.gaylord.com/adblock.asp?abid=11287

Degree-Only Students

Degree-Only students have different deadlines for submitting their documents. You may be eligible to register for Degree-Only if you have successfully defended in the semester prior to the one in which you plan to graduate. During your graduating semester, your thesis or dissertation must be submitted to and approved by The Graduate School by the final day to add a course in the semester of graduation. Further, Degree-Only registration must be completed by close of business on the last date to add class for the semester of graduation. Please be aware that your document must be approved by The Graduate School prior to registration. Thus, the document should be submitted a few days prior to the last day to add in order to provide reviewers adequate time to examine the document.

OVERALL FORMATTING

Your computer software should be flexible enough to meet the requirements in this guide. The inability to adjust your program does not relieve you from meeting format requirements.

Many students in science, engineering, and mathematics use the software LaTex. For information on LaTex, see The Graduate School ETD home page, where you will find a link to a template adapted to comply with these guidelines. The template does not, however, cover all the requirements herein, so you should become familiar with these guidelines even when using LaTex.

Margins

- Margins of your document must be consistent throughout. Suggested margins are ½ to 1 inch. If you plan to print and bind a copy of your document, you should use margins of 1½ inches on the left margin and 1 inch top, bottom and right side.
- You may allow an extra space of no more than three double-spaced lines at the bottom of a page to move a lone subheading at the end of a page to the following page. See "Tops and Bottoms of Pages" below.
- Margins may be either left justified or full justified (both left and right alignment). Use full
 justification only if your software does not introduce large, unsightly spaces between words in its
 attempt to justify the left and right margins of a short line. Left justification usually permits you
 more flexibility.

Spacing

Your document may be either single spaced or double spaced. Use consistent spacing throughout your document.

Single Spacing:

If you choose to double space, you must still single space the following:

- In the Table of Contents for entries within a chapter and between the chapter headings and their subheadings, if used (see examples on pages 30 & 31)
- Block quotations (remember to remove the quotation marks from block quotations). Do not create a block quotation for a short quote of fewer than four lines.
- Long chapter titles and subheadings, figure captions, table captions, footnotes, endnotes, bibliographic entries that are longer than one line of text.

Double Spacing:

Whether you choose to single space or double space your document, you must still <u>double space</u> the following:

- Above each main heading listed in the Table of Contents (do not double space subheadings)
- Above each table and figure title in the List of Tables and List of Figures
- Above each entry in your bibliography and endnotes
- Above and below each table or figure if the table or figure is placed between text on a page
- Above a table or figure if the table or figure appears at the bottom of a page
- Below a table or figure if the table or figure appears at the top of a page

White Space

White space in text of more than three double-spaced lines is not permitted. If a table or figure does not fill a page, use the next occurring text to fill in the white space. Tables and figures do not have to be placed at the end of a paragraph or a section. It is perfectly acceptable to place tables and figures within sentences following where they are first mentioned in the text.

White space is only permissible when it appears at the end of a chapter/main heading. This is because each chapter/main heading must start on a new page.

Tops and Bottoms of Pages

- Every page of your document must start at the top of the page. This includes your title on the title page, all main headings as these must start a new page, lines of text, and any tables, figures, formulas, etc. that might fall at the top of a page.
- Avoid beginning and ending your pages awkwardly. The general rule: have at least two lines of a
 paragraph at the top and bottom of a page. More specifically, the following items are not allowed:
 - A paragraph-ending line of text that is the first line of a new page, thus separating it from the rest of the paragraph. This is called an "orphan." To solve this problem, either bring an additional line from the previous page forward to this page containing the orphan or revise your text on the previous page so that the orphan can be moved to the preceding page so that it is with the rest of its paragraph. A paragraph-opening line of text that appears by itself at the bottom of a page, thus separating it from the rest of the paragraph. This is called a "widow." To correct this problem, simply begin the paragraph on the following page, or move a line of text from the following page to join this single paragraph-opening line of text on the preceding page.
 - A page ends with a subheading at the bottom of the page. Each subheading must be followed by at least two lines of text. The solution is to move the subheading to the following page.
 - A table caption that ends a page with the table being on the following page. Simply move the table caption to the following page. The table caption and table must always appear on the same page.
 - A figure appears at the bottom of a page while the figure caption appears on the following page. Simply move the caption to the previous page. If there is insufficient space for it, try reducing the size of your figure or readjust your text so that space is allowed for the caption. Another option would be to move the figure to the following page with the caption. However, be sure to move text to the previous page to fill the white space left where the figure had been. A figure and its caption must always appear on the same page.
 - The use of headers and footers (shortened document or chapter titles) at the tops and bottoms of pages).
- If a table is longer than one page, place (Table X continued) at the top left margin of the second page. Repeat the column headings of your table and then complete your table. If the table extends over several pages, repeat this same entry (Table X continued) and column headings on each subsequent page.

Font and Point Size

Font

Consistently use the same font throughout your document. Widely known fonts such as Arial and Times New Roman are easier to read. Script fonts are not permitted. Use the same font for all text, subheadings, page numbers, tables, figures, examples, formulas, captions/notations, footnotes/endnotes, references, etc. All table text and data must also be in this same font. Basically, everything must be the same font with the exception of text/data that appear in figures.

Point Size

- Either use 10- or 12-point type size for all text, subheadings, page numbers, tables, examples, formulas, captions/notations, footnotes/endnotes, references, etc. All table text and data must also be the same size. Basically, everything must be the same size with the exception of text/data that appear in figures or if you choose to make the document title and main headings larger.
- A larger point type size not to exceed 14-point may be used for the document title on the title
 page and for all main headings. Main Headings are those that appear only at the top of the page
 to open a main section of your document, such as Acknowledgments, Table of Contents, List of

- Tables, List of Figures, Abstract, Chapter Titles, References, Appendices, and Vita. They must all appear in the same location at the top of the page, whether centered or against the left margin.
- Text and data used in tables must be the same point size as the rest of your document. However, since figures are generally copied, text and data that appear in figures may be a different point size.

Boldface

Boldface is <u>only permitted</u> for the <u>main headings and subheadings</u>. It is not to be used for table and figure captions, formulas, page numbers, etc.

Italics

- Do not use italics for the title, main headings, subheadings, captions for tables, figures, formulas, quotations, page numbers, etc.
- Use italics for these specific purposes only:
 - o titles of journals and books
 - o titles of musical or artistic works
 - o scientific terms
 - o foreign words
 - o for one- or two-word emphasis

Pagination

- The title page is unnumbered even though it is considered page number i. Every other page of the document must have a page number.
- Number all the front matter pages in lowercase roman numerals, beginning with ii.
- Arabic page numbering (Page 1) begins with the first page following your abstract (usually your first chapter, introduction, or literature review). Arabic page numbers continue in a single sequence through the end of your document.
- Page numbers must be centered at the bottom of the page, at least one double space below the final line of text and no less than one-half inch from the bottom of the page.
- Page numbers on pages containing landscaped figures or tables should appear centered on the long side of the page, below the table or figure with the page number appearing on the right side of the page.

ORDER OF THE ELEMENTS

The elements in your thesis or dissertation must appear in the order below. Sample pages demonstrating proper formatting of these elements begin on page 27 of this document.

Front Matter

Title Page (**REQUIRED** in all documents; it is unnumbered; the following page is p.

ii [use roman numerals for all front matter pages through the Abstract])

Copyright Page (optional)

Dedication or **Epigraph** (optional; has no main heading at the top of the page or in the Table of

Contents)

Acknowledgments (optional)

Preface (optional)

Table of Contents (REQUIRED in all documents)

List of Tables (optional)

List of Figures (optional) (including Figures, Schemes, Examples, etc)

Abstract (**REQUIRED** in all documents; limited to 350 words; the final page of the

front matter and the final page number in roman numerals)

Body of Text

Introduction, Literature Review, or Chapter I

(page 1; number the remaining pages sequentially to the end)

Remaining chapters or sections as indicated in Table of Contents

Conclusions or **Results** (the final chapter)

Bibliography or **References** (**REQUIRED** in all documents that include citations)

single space each entry; double space between entries

Back Matter

Appendices (optional)

Vita (REQUIRED in all documents) For privacy, identity protection, and

security reasons, it is suggested that you limit personal information in this

section.

USING THE ELEMENTS

The thesis or dissertation must contain elements which unify the entire body of work into a single document instead of being a collection of dissimilar documents. For example, the thesis or dissertation must have a single topic. In addition, the document must have the following elements:

- A common Table of Contents covering the entire body of research
- An abstract of the complete study preceding page 1 of the body of the text
- A common introduction which ties all of the chapters together into a logical whole
- A final chapter which summarizes the overall results, conclusions, and recommendations for further research (if appropriate).

Students in the humanities ordinarily prepare a thesis or dissertation that includes (together with other, required elements):

- Introduction
- Literature Review
- Several narrative chapters or individual chapters on materials, methods, and results
- Tables, figures, or other illustrative elements appropriate to the student's discipline
- Discussion and/or Conclusion
- Bibliography, or List of References

The biggest difference between the documents prepared by students in the humanities and those prepared by students in science, math, and engineering is the style of documentation, i.e., notes and references. Ordinarily, all students, especially science, math, and engineering students, will follow the style of notes and references used in their fields, whether it be MLA, APA, ACA, etc. The main concern is to apply the style consistently throughout your document.

Students who have published or plan to publish one or more of their chapters in a scholarly journal may choose to organize the elements of each chapter as they would for a journal article. Thus, each chapter may have its own introduction, literature review, materials and methods, results, discussion, summary, and references. To maintain unity, however, all the chapters, even those that will not be published or that have been published in more than one journal, must follow the format of a single journal. In addition, the following elements must be present:

- A single overall abstract
- A single overall introduction
- A single overall conclusion

If a style conflicts with these guidelines, these guidelines will take precedence.

FORMATTING EACH ELEMENT

Front Matter

Title Page (Required)

- Your title should be clear, unambiguous, and specific.
- The title must be single spaced, in all capital letters and centered at the top of the page.
- Boldface is not used in the title.
- Font must be the same throughout the document including this page.
- Font size for the title of the document may be 14 point, but no larger. The rest of the text on this page and the document must not be larger than 12 point.
- Follow the exact form for each line of the title page as shown on the sample pages found on pages 22 and 23 of this document. Note the line spacing, the capitalization of each word, and the placement of the entries.
- Use the official name that LSU shows in your official record. This name should be your full name. If your name is not correct, contact the Office of the University Registrar, 112 Thomas Boyd Hall to file an official name correction.
- The lower section of this page beginning with the word "by" should be centered and placed such that the month and year of your graduation with this degree is sitting on the bottom margin.
- Do not place a comma between the month and the year of your graduation with this degree (Example: August 2014)

Dedication and Acknowledgments

These two sections, which are best kept brief, are in the same font and point size as the body of the text.

- These two Main Headings, though not required, are best kept brief.
- Font size for these Main Heading(s) may be 14 point, but no larger. Font for them must be the same font as the entire document. The rest of the text on these pages and the document must be the same font and point size as the body of the text not to exceed 12 point.
- Do not list the Dedication in your Table of Contents or give it the heading "Dedication."
- The Acknowledgments section is frequently the first main section in most documents, therefore, its heading, Acknowledgments (alternate spelling is Acknowledgements), is considered a Main Heading that must be formatted like all other Main Headings in your document. See the section entitled "Main Headings and Subheadings," below.
- Either spelling, Acknowledgments or Acknowledgements, is acceptable but use only one spelling in your document. The form on its page and the form in the Table of Contents must be the same spelling of the word.
- If there is an Acknowledgments page, it must be included in the Table of Contents.

Table of Contents (Required)

- Single space every multi-line chapter title and subheadings (if included).
- Double space between each of the Main Heading sections.
- The Main Heading, Table of Contents, must not be included in the table's list of contents.
- Font and font size must be the same font and point size as the body of the text. The only exception is that the font size for the Main Heading, Table of Contents, on this page may be 14 point, but no larger. The rest of the text on this page must not be larger than 12 point.

- Use no boldface in the text of the Table of Contents. The sole exception is if all Main Headings in the document are in boldface, then the "Table of Contents" heading must be in bold. Thus, this Main Heading would be the only thing in boldface on this page.
- You need not include subheadings in your Table of Contents. If you choose to include subheadings, only a-level (top- or first-level) subheadings generally need to be included. If subheadings are included in the Table of Contents, the text of the subheadings must appear in the Table of Contents <u>exactly</u> (word for word, character by character, and punctuation by punctuation) as it does in the body of the document.
- All subheadings must be single spaced and indented (one tab) directly under the Main Heading. See examples on pages 30 and 31 of this document for formatting this page.

Lists of Tables, Figures, Schemes, Nomenclature, Abbreviations, etc.

- When necessary for textual cross-reference, a List of Tables, List of Figures, List of Nomenclature, List of Schemes, List of Abbreviations, etc., may be included in the preliminary pages of the document.
- When lists of special terms and abbreviations are used, they should appear immediately
 preceding the abstract.
- When such lists are used, captions and/or legends must agree word for word with captions in the body of the work using the first few words or phrases that give an understanding of the table or figure.
- Page numbers in these lists must be those on which the table of figure begins or on which a lengthy caption appears.

Abstract (Required)

This brief summary of your project should describe the problem being addressed, how you addressed it, and the results and conclusions reached.

- An abstract should not exceed 350 words (numbers and components of hyphenated words count as one word each).
- It should be in the same font and point size; and have the same line spacing as the body of the text.
- The abstract may not contain graphs, tables, or illustrations.
- An English translation must be provided of an abstract in a language other than English. The abstract entered on the ETD collection page should be in English.

Body of Text

Main (Chapter-level) Headings

- All main headings, including chapter or main section titles, must begin a new page. Main headings include titles such as Acknowledgments, Table of Contents, List of Tables, List of Figures, Abstract, Chapter Number and Title, References, Appendix Number and Title, and Vita.
- Main headings should be more visually prominent than your text and subheadings through the
 use of a larger point size (e.g., one point size larger than your text), solid capital letters, and/or
 boldface.
- All main headings must be identical with one another in font, point size, placement, capitalization, underlining, and boldfacing throughout the document. Consistency of the style of the main headings throughout the text is mandatory.
- If you do not use solid capital lettering in your main headings, you must use the headline style of capitalizing—i.e., capitalize the first letter of all words except articles, conjunctions, and prepositions.
- Single-space main headings longer than one line.

Subheadings

Subheadings work with main headings to form the framework for your document. They follow a logical, descending sequence from the "a-level" subheading down to the "c-level" or even "d-level" subheading. See Kate Turabian's *Manual for Writers* for more information on subheadings. Overall rules for subheadings are:

- Each subheading should not begin a new page; a subheading should be separated from preceding and following text by no more than a double space.
- The first (a-level) subheading should be visually subordinate to the chapter title. Each succeeding level of subheading should be visually subordinate to the preceding level.
- The format of each level of subheading must be identical to the format of others on the same level.
- Maintain your capitalization style for each level of subheading, whether lowercase or headline style.
- Avoid skipping levels from, for instance, a-level to c-level. Maintain consistency in all chapters.
- Avoid using more than three levels of subheadings.

You may choose from many styles of subheadings.

- If you are in science, math, or engineering, you are likely to use numbered subheads. Match the first digit of numbered subheads with the chapter number; e.g., the first subheading in Chapter 2 will be numbered 2.1. Numbered subheadings need no visual distinction from one another because the numbers sufficiently distinguish one level from another. They may all appear against the left margin on a line by themselves, although you may boldface the numbers to distinguish them from the text and for easy reference.
- Documents in the humanities rarely need numbered subheadings. You may use placement, underline, capitalization, point size, or boldface to visually distinguish unnumbered subheadings from one another. The following style uses only placement and boldfacing:

o a-level British Literature [on a line by itself, centered]

o b-level **Prose and Poetry** [on a line by itself, against left margin]

o c-level Victorian Poetry. [¶ indent, follow with a period, *run in with the*

beginning of the paragraph.]

Notes

Use a consistent style of documentation throughout. If your major professor does not recommend a specific style manual for documentation, such as Modern Language Association or American Chemistry Association, refer to the most recent edition of the following:

- University of Chicago Press, *The Chicago Manual of Style*. This publication is useful for students in all disciplines and for students who hope eventually to publish with a scholarly press.
- Kate L. Turabian, A Manual for Writers of Term Papers, Theses, and Dissertations. Recommended for all disciplines.
- MLA Handbook for Writers of Research Papers, Theses, and Dissertations.
- Kathleen Dugdale, A Manual of Form for Thesis and Term Reports, Indiana University Press.
- H. J. Tichy, Effective Writing for Engineers, Managers, and Scientists, John Wiley & Sons, Inc.
- W. G. Campbell and S. V. Ballou, Form and Style, Houghton Mifflin.

Notes may be placed at the bottom of the page (footnotes) or grouped at the end of each chapter (endnotes).

- Footnotes may be numbered consecutively throughout the document or begin with number 1 in each chapter.
- Endnotes begin with number 1 in each chapter.
- Endnotes are a subsection of the chapter and thus the heading "Endnotes" should be formatted as an a-level subheading, and the notes should not begin on a new page.
- Single space within each endnote; double space between each endnote.

Tables and Figures

Format the numbers and titles of all tables and figures identically throughout the text, consistently using a punctuation and capitalization style. Maintain the same font and point size you use in text.

- Table numbers and titles must appear above the table.
- Figure numbers and titles must appear below the figure.
- Tables, figures, and graphs can be numbered one of two ways in the text. They can be numbered consecutively throughout the text and appendices (i.e., 1-XX, 2-XX). Alternatively, they can be numbered consecutively within each chapter and appendix; i.e. Table 2.1. (in Table 2), Table A.1. (in Table A.2).
- Multi-line titles and captions must be single spaced.
- The use of frames around tables and figures is optional, but their use must be consistent—frame all or frame none.
- You should place tables and figures near, but following, their first appearance in text. They do not necessarily have to be on the same page as the first appearance.
- It is not permissible to group tables and figures at the end of a chapter or document.
- Two or more small, successive tables or figures may be placed on a single page.
- Large tables and figures sometimes need landscape orientation. In that case, they and their titles, captions, and the page number must face the right side of the page. If there is no room for the table number, title, and caption, they may appear alone, centered on the preceding page.
- Even though you may slightly reduce or enlarge tables and figures to fit within the margins of the page, the number, title, and caption font size should be consistent with the remainder of the body.
- If a table is longer than one page, place a notation in parentheses at the top left margin of all continued pages: (Table 2.2 continued). You must repeat a table's column headings on the continued pages.
- A single figure may not be divided into more than one page. If it is too large to permit space for its number, title, and caption, they may be placed alone in the center of the preceding page.
- Multi-part figures must have a single caption which incorporates the information about each part
 and can appear on two or more pages with the caption on the first page and (figure continued) on
 subsequent pages. The parts must be labeled a, b, and c, etc.

Photographs, Hand-Drawn Illustrations, Images, Audio, and Oversized Illustrative Materials

All illustrative materials must be included as standard electronic images—.jpg, .tif, .gif—within the body of the document. Your captions must be in the same font and point size used throughout the document. Audio files may also be included in acceptable media formats.

List of References

As with footnotes and endnotes, follow the style ordinarily used in your discipline. If there is no particular one, refer to the latest edition of the *Chicago Manual of Style* or Kate Turabian's *Manual for Writers of Term Papers*, *Theses*, *and Dissertations*.

- You must use a consistent style for all your references.
- Single space within each reference, but double space between each one.

Back Matter

Appendices

Appendices are an optional element that students use for letters of permission, IRB certifications, questionnaires, surveys, and other extra material that is relevant but not critical to the document's purpose.

 Letters of permission must be included in an appendix if previously published work is included in the document.

- Copies of IRB approvals must be included in an appendix if human subjects are used in the research.
- Appendices must appear in the Table of Contents with a number (Appendix 1) or letter (Appendix A), and a title that broadly describes each appendix's contents.
- Appendix titles must be in the same font, format, and style as all other main headings.
- Although the contents of an appendix may be copied and pasted, they must meet the margin guidelines.
- If there is only one appendix, provide only its title, without a number or letter.

Vita (Required)

The Vita is a brief (one or two paragraphs) biographical sketch written in the third person. Note: this is not a Curriculum Vitae.

- Use "Vita" as the main heading in the same font, format, and style as all other main headings.
- Because a thesis or dissertation is a formal document, abbreviations for states and countries should not be used.
- Avoid the use of your personal information (ex: birth date, place of birth, etc.) for privacy and identity protection.

COPYRIGHT AND ETHICAL MATTERS

Copyrighting Your Document

The copyright of any thesis or dissertation resides with the individual student author. by virtue of Part VII of the *University Bylaws and Regulations*, p. 47.

Section 7-4. LSU Works, LSU Software, LSU Databases, LSU Digital Media, and Course Materials. The various provisions of Section 7-3 shall apply to LSU Works, LSU Software, LSU Databases, and LSU Digital Media. In addition, the provisions of this Section 7-4 shall also apply to LSU Works, LSU Software, LSU Databases, and LSU Digital Media, but not to other forms of LSU Intellectual Property. This Section 7-4 shall also apply to Course Materials.

- **a.** Notwithstanding the provisions of Section 7-3(a) above, LSU releases to the respective author(s) all of LSU's interest in any copyright to a book, article, lecture, thesis, dissertation, other literary work, work of art, Course Material, or musical composition that would otherwise be an LSU Work; except that LSU's interest shall not be so released:
 - (i) if LSU publishes the work itself; or
 - (ii) if LSU publishes or produces a derivative work based on that work, where the derivative work is an audio, video, or digital production or broadcast, including by way of example video recordings of lectures, other recordings of lectures, distance learning activities, or other course-related activities; or
 - (iii) if LSU is required to deliver the work to a third party under a research contract or other contract between LSU and the third party. This release of certain rights to the author(s) does not apply to LSU Software or to LSU Databases. LSU reserves a nonexclusive, paid-up, royalty-free right to distribute copies of Course Materials, theses and dissertations, both internally and to third parties, whether by electronic means, microfilm, or otherwise.

LSU Board of Supervisors Regulations, Part VII.

Copyrighting the thesis or dissertation is optional. Most master's students do not choose to copyright their document. Students who wish to copyright their documents may contact the Copyright Office directly, at the Library of Congress, 101 Independence Ave., S.E., Washington, D.C.20559-6000, or by visiting their web site at http://www.loc.gov/copyright/.

If you elect to copyright the document, in the front matter following the title page, you will need to insert a page (p. ii) that includes only the following notice:

© [year of graduation/copyright] [Your full legal name] All rights reserved

Using Material That You Have Published

The use of published articles in a dissertation carries certain responsibilities. In all cases, you must:

- Obtain departmental approval.
- Adhere to the requirements for unity set forth in the section above, using special care to integrate
 your published material into your document logically.
- Be the principal author (the first listed) of the published article.
- Obtain written permission from the journal to use the published material in your dissertation.
 Without this written permission and proof of authorship, no thesis or dissertation containing the student's previously published work will be accepted by The Graduate School. When requesting this permission, be certain to mention that your dissertation will be viewable on the web.
- The letters requesting and granting permission(s) to use the article(s) must appear as an appendix in your dissertation.

• The following acknowledgment must appear at the bottom of the first page of each published chapter or section: "This chapter [section] previously appeared as [authors' names, article title, and publication data]. It is reprinted by permission of [copyright holder's name—see the permission letter for proper acknowledgment phrase.]"

Using Material That Belongs to Others

Published

The best way to avoid the slightest suspicion of plagiarism is to give the source of all published material, including material that falls under the concept of *fair use* (quoting without needing permission). The acknowledgment can appear in the form of a footnote, endnote, or numbered reference. In the case of an image, its source may appear at the end of a caption. In all cases, keep copies of your letters requesting permission.

- You must obtain permission to use any previously copyrighted material that does not fall under fair use. Such material includes photographs, maps, artwork, or text that you have extensively copied or paraphrased. You must always inform the journal, press, or individual granting permission that your document will be available for viewing on the web. If you cannot obtain full permission for such work, you may not use it.
- Reproducing a single graph, table, or chart that presents data in a straightforward relationship should generally be considered *fair use* (*Chicago Manual of Style*, 15th ed.). Unlike artwork, which represents an individual's talent and labor, such data could conceivably be compiled by any number of individuals at any time and thus lacks the exclusivity of individually created work.
- Other factors to consider in deciding whether you have employed fair use:
 - Whether a previously published item represents a very small part of the original source—and is also a small part of your document
 - The nature of the copyrighted work, whether factual or fanciful and creative
 - Whether your use of the copyrighted work affects its potential market or value
 - Whether your use is not commercial but is for nonprofit educational purposes. This factor favors your use, which is both nonprofit and educational.
- A general guideline: Fair use may be applied when you have judiciously used the work of others in appropriate proportions and have transformed it through your scholarly examination.
- The student is responsible for ensuring that all copyright/patent laws are followed in the use of material published or written by others.

Unpublished

The *Chicago Manual of Style*, 15th edition, states: "Getting permission for **unpublished** works [emphasis added] presents an entirely different problem. Instead of a publishing corporation, one must deal with the author or artist or their heirs, who may not be easily identified or found. If the writer is dead, it may be especially difficult to determine who controls the copyrights." This difficulty also occurs, for example, if you wish to use a published photograph wherein the publisher informs you that the photographer retains the copyright. Several unanswered requests for such material might be considered leniently in case of a dispute, because you will have shown a good faith attempt to obtain permission. For this reason, it is always important that you keep copies of your requests.

Please refer to Chapter 4 in the latest edition of the *Chicago Manual of Style* for a fuller explanation of your responsibilities regarding the use of copyrighted material. If necessary, consult a lawyer specializing in copyright.

Using Collaborative Research

If your thesis or dissertation contains material that is part of a larger collaborative project, you must be able to identify one aspect of that project as your own and demonstrate your original contribution. It is the responsibility of your major professor and advisory committee to ensure that the thesis or dissertation represents your original, individual effort.

Ethical Matters

Students are responsible for adherence to all University standards regarding the conduct of research, completion of academic studies, and all matters relating to the completion of the thesis, dissertation or monograph. Please see appropriate University documents, including but not limited to:

- The LSU Code of Student Conduct
- LSU Policies and Procedures
- LSU rules for <u>Accountability</u> and <u>Academic Integrity</u>
- IRB policies regarding research conduct
- All Federal policies relating to research conduct

FINAL THESIS CHECKLIST

Refer to	the checklist below before uploading your document to the ETD Collection website.
	Have you submitted your Application for Degree to the Office of Graduate Student Services?
	Have your signed committee approval sheets been submitted to the Office of Graduate Student Services by your department?
	Have you thoroughly proofread the manuscript for content and syntax?
	Are your name and thesis title identical on the title page and approval sheets?
	Have you checked for accuracy of pagination?
	Have all heading and subheading changes and page number changes been made in the Table o Contents?
	Do the Table of Contents, List of Tables, and List of Figures reproduce, word-for-word, the headings and titles as expressed in the text?
	Does your thesis meet margin, font, and size requirements?
	If you have any previously published material in your dissertation, have you applied for and received permission to reprint it? (A copy of any letter(s) of permission must appear in an appendix.)
	Have you notified The Graduate School whether or not you will be attending commencement?
	If you wish to withhold your document from public access, have you submitted your Request for Restricted Access form?

FINAL DISSERTATION AND MONOGRAPH CHECKLIST

Have you submitted your Application for Degree to the Office of Graduate Student Services? Have your signed committee approval sheets been submitted to the Office of Graduate Student Services by your department? Have you thoroughly proofread the manuscript for content and syntax? Are your name and dissertation title identical on title page and approval sheets? Have you checked for accuracy of pagination? Have all heading and subheading changes and page number changes been made in the Table of Contents, List of Tables, and List of illustrations? Do the Table of Contents, List of Tables, and List of Figures reproduce, word-for-word, the headings and titles as expressed in the text? Does your dissertation meet margin, font, and point-size requirements? Have you notified The Graduate School whether or not you will be attending commencement? If you have any previously published material in your dissertation, have you applied for and received permission to reprint it? (A copy of any letter(s) of permission must appear in an appendix.) If you wish to withhold your document from public access, have you submitted your Request for Restricted Access form? Have you completed the Survey of Earned Doctorates? To do so, visit

Refer to the checklist below before uploading your document to the ETD Collection website.

[https:\\sed.norc.org\survey].

MOST FREQUENT ERRORS

Document Errors:

- Incorrect title page format: Line for line, space for space, and capitalization or lowercasing of each word.
- Incorrect listings in the Table of Contents against the in-text headings and subheadings, word for word.
- Incorrect titles in the Lists of Tables and Lists of Figures against the titles as they appear in the text.
- Incorrect spacing: Single space subheadings, table titles, and figure titles of more than one line—both in text and in the Table of Contents.
- Incorrect capitalization: Consistency in the lowercase style or the headline style of capitalization in: chapter titles, subheadings, figure titles, and table titles.
- Incorrect formatting of references: Single space each entry in a list of references and double space between each entry.

ETD Collection Page Errors:

- Incorrect entry of document title on ETD Collection Page: Mixed case title is required.
- Incorrect entry of committee names: Last name, First Name
- Keywords should be entered with a comma between the words, no spaces. Example: recycled paper,post-consumer recycled paper,bond paper.

Submission Errors:

- Late Submissions; Submit your document as early as possible. Document reviewers cannot review every student's document on the last day!
- Failure to submit "Request for Restricted Access" form to specify how your document should be released on approval.
- Failure to complete the Survey of Earned Doctorate" survey (Doctoral students only)

SAMPLE PAGES

[Sample Title Page: DISSERTATION]

DISSERTATION TITLE IN ALL CAPITAL LETTERS: SINGLE SPACE AND USE A MAXIMUM 14 POINT FONT SIZE

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

The Department of Chemistry

Check the *LSU General Catalog* for the correct name of your degree and department.

by Elizabeth R. Smith B.S., University of Tennessee, 2003 M.S., Auburn University, 2007 May 2013 [Sample Title Page: MASTER'S]

MASTER'S TITLE IN ALL CAPITAL LETTERS: SINGLE SPACE AND USE A MAXIMUM 14 POINT TYPE SIZE

A Thesis

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Master of (degree)

in

The Department of Chemistry

Check the LSU General Catalog for the correct name of your degree and department.

by Elizabeth R. Smith B.S., University of Tennessee, 2003 May 2013

[Sample Table of Contents # 1]

TABLE OF CONTENTS ACKNOWLEDGMENTS......ii ABSTRACTiv **CHAPTER** 2 REVIEW OF LITERATURE19 3 MATERIALS AND METHODS.......59 Methodology......61 4 RESULTS AND DISCUSSION70 Results of Content Analysis71 5 SUMMARY AND CONCLUSIONS......95 REFERENCES......125 **APPENDIX**

ii

[Sample Table of Contents # 2]

TABLE OF CONTENTS
ACKNOWLEDGMENTSii
ABSTRACTv
CHAPTER 1. INTRODUCTION 1 1.1 Biological Neurons 1 1.2 Artificial Neural Networks 4 1.3 General Structure of an Artificial Neuron 5 1.4 Neural Nets as Classifiers 9
CHAPTER 2. FEED FORWARD NEURAL NETWORKS162.1 Single-Node Neural Network162.2 Linear Separability182.3 Single-Node Network Learning Algorithms202.4 Capacity of Single-Node Neurons282.5 Multi-Node Neural Network292.6 Multi-Layered Feedforward Neural Nets292.7 The Backpropagation Algorithm31
CHAPTER 3. A MODULAR APPROACH FOR SOLVING CLASSIFICATION PROBLEMS 42 3.1 Introduction 42 3.2 Goals Behind Proposed Algorithm 42 3.3 Proposed Algorithm 43 3.4 Handwritten Digit Recognition 53 3.5 Conclusions 64
REFERENCES70
APPENDIX: ARTIFICIAL STRUCTURES
VITA84

ii

[Sample List of Tables]

LIST OF TABLES

1.	Mean Parameters of Spontaneous Firing Patterns	37
2.	Mean Parameters of Spontaneous Bursting Patterns	38
3.	Comparison of Mean Interspike Intervals of Spontaneous Firing Patterns	39
4.	Counts of Spontaneous Firing Pattern Types in Three Groups of Neurons in the Hypothalamus9) 7
5.	Chi-Square Analysis of Spontaneous Firing Pattern Type Distribution)0
6.	Comparison of Mean Trends (KaH) of Osmotically Test Identified Neuroendocrine Cell Firing Pattern Type	0
7.	Comparison of Mean Trends (KaR) of Osmotically Tested Identified Neuroendocrine Cell Firing Pattern Type	1
8.	Correlation of Osmosensitivity and Conduction Velocity	15
9.	Chi-Square Analysis of Tonic and Dynamic Cells within Firing Pattern Type11	17
10.	Characteristics of Rostral and Caudal Areas of the Supraoptic Nucleus	20
11.	Comparison of Mean Trends and Osmosensitivities of Rostral and Caudal Areas of the Supraoptic Nucleus	22

iii

[Sample List of Figures]

10. Hazardous Waste Injection Wells' Depth of Injection Zone59

İν

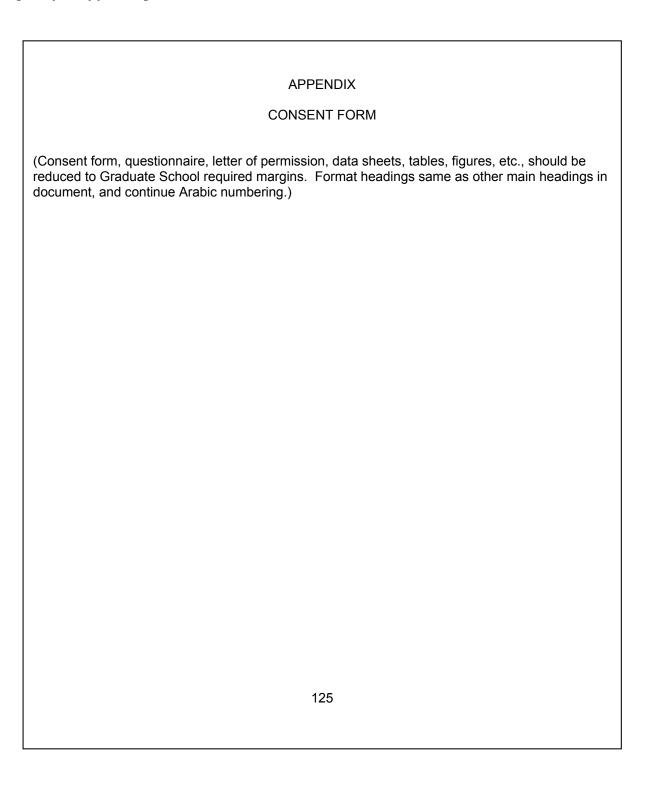
[Sample Bibliography]

Bibliography

- Allard, Scott W. and Sheldon Danziger. 2000. "Welfare Magnets: Myth or Reality?" *The Journal of Politics* 62:350-368.
- Ambrosius, Margery Marzahn. 1989. "The Effectiveness of State Economic Development Policies: A Time-Series Analysis." *The Western Political Quarterly* 42:283-300.
- Arthur, W. Brian. 1994. "Inductive Reasoning and Bounded Rationality." *The American Economic Review* 84:406-411.
- Bacot, A. Hunter and Roy A. Dawes. 1997. "State Expenditures and Policy Outcomes in Environmental Program Management." *Policy Studies Journal* 25:355-370.
- Barbera, Anthony J. and Virginia D. McConnell. 1986. "Effects of Pollution Control on Industry Productivity: A Factor Demand Approach" *The Journal of Industrial Economics* 35:161-172.
- Bartik, Timothy J. 1988. "The Effect of Environmental Regulation on Business Location in the United States." *Growth and Change* 19:22-44.
- Becker, Randy and Vernon Henderson. 2000. "Effects of Air Quality Regulations on Polluting Industries." *The Journal of Political Economy* 108:379-421.
- Beer, Samuel H. 1998. "Welfare Reform: Revolution or Retrenchment?" Publius 28:9-15.
- Brace, Paul. 1991. "The Changing Context of State Political Economy." *Journal of Politics* 53:297-317.
- Brace, Paul. 1993. *State Government and Economic Performance*. The Johns Hopkins University Press:Baltimore.
- Brierly, Allen Bronson and Robert Costello. 1999. "Accounting for State Economic Performance: A Time-Series Cross-Sectional Analysis of the Limits of State Economic Policy." International Journal of Economic Development 1(3):280-310.
- Brueckner, Jan K. 2000. "Welfare Reform and the Race to the Bottom: Theory and Evidence" Southern Economic Journal 66:505-525.
- Bovenger, A. Lans and Sjak A. Smulders. 1996. "Transitional Impacts of Environmental Policy in an Endogenous Growth Model". *International Economic Review* 37:861-893.
- Brown, R. Steven and Michael J. Kiefer. 2003. "ECOS Budget Survey." *ECOStates* Summer: 11-15.

119

[Sample Appendix]



[Sample Vita]

VITA
VIIA
Susan Mary Johnson, a native of Topeka, Kansas, received her bachelor's degree at the University of Kansas in 2003. Thereafter, she taught school in Tulsa, Oklahoma, and worked on local and national political campaigns. As her interest in politics grew, she made the decision to enter graduate school in the Department of Political Science at Louisiana State University. She will receive her master's degree in May 2013 and plans to begin work on her doctorate upon graduation.
123