

2014 Thesis Guidelines

Graduate School/Adams Administration Building/Suite 11

TROY UNIVERSITY

Graduate School Publication

Prepared with the assistance of the members of the Graduate Thesis Guidelines Committee

Dr. Dianne Barron, Chair

Dr. Terry Anderson

Dr. Glenn Cohen

Dr. Tonya Conner

Dr. Jonathan Harrington

Dr. Jeff Lee

Dr. Chris Pritchett

Dr. Karen Ross

Dr. Michael Stewart

Dr. Isabelle Warren

Dr. Bill Zhong

Also available on the web

<http://trojan.troy.edu/graduateschool/assets/documents/thesisguidelines.pdf>

The Graduate School
011 Adams Administration Building
Troy, Alabama 36082
(334) 670-3189

All style manuals such as this lean heavily on existing style manuals. In the development of this style manual, those prepared by Michigan State University and Alabama Agricultural and Mechanical University were especially helpful.

Copyrights are reserved. This document may not be copied without the written consent of the Troy University Graduate School, Troy, Alabama 36082

August, 2014

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION	5
The Thesis Student.....	6
Role of the Thesis Student.....	6
Responsibilities of the Thesis Student	6
The Thesis Chair	8
Selecting the Thesis Chair	8
Role of the Thesis Chair.....	9
Responsibilities of the Thesis Chair	9
Change of Thesis Chair	10
The Thesis Committee.....	11
Selecting the Thesis Committee	11
Role and Responsibilities of Members of the Thesis Committee.....	11
Change in Committee Membership.....	12
CHAPTER TWO: FORMATTING THE THESIS.....	13
Thesis Formatting Requirements.....	13
Examples of Selected Style Manuals	13
Paper, Photocopying, and Quality	13
Font Formatting	14
Word Processing	14
Printer Requirements	14
Margins.....	14
Pagination.....	15
Spacing	15
Widows and Orphans	16
Tables, Figures, and Appendices	16
Tables	16

Figures.....	17
Appendices.....	20
Foreign Languages	20
CHAPTER THREE: CONTENT AND ORGANIZATION OF THESIS	21
Parts of the Thesis.....	21
Preliminary Pages	21
Fly Page	21
Title Page.....	21
Thesis Acceptance Page	22
Abstract.....	23
Human or Animal Subjects Review	24
Copyright Page	24
Dedication	25
Acknowledgments	26
Table of Contents	26
List of Tables.....	27
List of Figures.....	28
List of Plates, Symbols, Abbreviations, and/or Specialized Nomenclature	29
Text Pages.....	29
Introduction	29
Body of Thesis	29
Headings.....	30
Glossary and Endnotes	31
Reference Materials.....	31
References or Literature Cited	31
Bibliography	32

Appendices.....	32
Curriculum Vitae	33
Order of the Thesis	33
Use of Copyrighted Material	34
Use of Reprints in Thesis	34
CHAPTER FOUR: DEGREE COMPLETION AND FINAL THESIS APPROVAL	35
Submission of Final Draft and Defense	35
Gaining Thesis Committee Approval	35
Scheduling a Thesis Defense	36
Oral Defense of Thesis	36
Submission of Thesis to Graduate School.....	36
Submission of Final Copies of Thesis to Library	37
Recording by Troy University Registrar	37
Distributing Copies of Thesis	37
APPENDICES.....	38
Appendix A: Schedule for Thesis Completion	39
Appendix B: Thesis Committee Assignment Form.....	40
Appendix C: Graduate School Thesis Checklist.....	41
Appendix D: Library Thesis Check List.....	42
Appendix E: Sample Title Page	43
Appendix F: Sample Thesis Acceptance Page.....	44
Appendix G: Sample Abstract	45
Appendix H: Sample Human or Animal Subjects Form.....	46
Appendix I: Sample Copyright Statement	47
Appendix J: Sample Dedication	48
Appendix K: Sample Acknowledgments.....	49
Appendix L: Sample of Traditional Table of Contents	50

Appendix M: Sample of Scientific Table of Contents 51

Appendix N: Sample of List of Tables 52

Appendix O: Sample of List of Figures..... 53

Appendix P: Sample Table and Figure Format 54

Appendix Q: Sample Headings 55

Appendix R: Sample First Page of Chapter or Section 56

Appendix S: Thesis Binding Form 57

Appendix T: Sample Appendices..... 58

Appendix U: Sample Vitae 60

CHAPTER 1: INTRODUCTION

The thesis is frequently the culmination of graduate training at Troy University. It allows candidates for the Master's or Education Specialist's degree the opportunity to pursue original research designed and prepared by the thesis student under the supervision of a committee composed of qualified graduate faculty members. As a result, the thesis can be a significant component of the graduate study experience for the student and the University community. Students in programs having a "thesis option" must confirm both suitability and availability.

Typically, the "thesis option" is chosen by graduate students, with approval of program adviser, who might continue their education at the doctoral level. By selecting the thesis option a student is committing to a year or more of thesis work. It is important to note that thesis development, research, writing, and completion are driven by student initiative. While substantial resources are available to the thesis student, the responsibility for the successful completion of the thesis rests with him or her. The faculty will play a substantial role in the direction of the project. Nonetheless, the student must take charge of seeing that a quality thesis is presented for consideration in a timely manner and is in compliance with the specific requirements in these *Guidelines*.

The thesis is an important University document, both academically and for students personally, as it is considered a professional publication. It will become a lasting legacy of their graduate experience. For this reason, the thesis student must exercise utmost care in the preparation of the final thesis for submission. In turn, the University is committed to processing the document for publication, binding, and library archiving.

The *Troy University Thesis Guidelines* has been prepared to support the work of the thesis student who is required to present a formal written document as partial fulfillment of the requirements for the graduate degree at Troy University. It is the official manual of Troy University related to thesis format, approval processes, and time requirements. In order to make certain that theses from Troy University display the significance that is placed on them, the thesis student is required to follow the strict formatting and submission guidelines contained in these *Guidelines*.

These *Guidelines* set forth the thesis requirements established by The Graduate School of Troy University. The *Guidelines* are designed to produce documents that are uniform in style, but also allow some flexibility for the particular requirements of various disciplines. Individual departments, schools and colleges may impose additional

requirements or may specify requirements in greater detail. It is incumbent on the student to learn what, if any, special departmental/school/college requirements may apply. The thesis should be prepared in accordance with the instructions of these *Guidelines* and the requirements of the specific graduate program.

Any proposed deviation from these *Thesis Guidelines* must be referred to the Dean of the Graduate School for approval before the thesis is completed in final form. The rules in this *Troy University Graduate School Thesis Guidelines* take precedence over previous publications issued prior to this date of publication. Please consult the Troy University webpage <http://trojan.troy.edu/graduateschool/assets/documents/thesisguidelines.pdf> for changes that may have occurred since this publication.

The research that the thesis student has done, short of final preparations of the thesis, is outside the province of the *Thesis Guidelines*. The assumption is made that the research is complete, a comprehensive outline of the main text has been prepared, and the final draft has been examined and approved by the thesis chair and thesis committee, and the time for word processing the final form is at hand. The *Thesis Guidelines* also assumes that the student has good command of the English language. Questions regarding the format of the thesis that are not adequately answered in the *Thesis Guidelines* may be directed to the Dean of the Graduate School.

The Thesis Student

Role of the Thesis Student

The thesis process is driven by the student. The thesis student should work closely with the thesis chair throughout the duration of the thesis project. The thesis chair is considered the primary thesis adviser. The student should consult with the thesis chair concerning departmental thesis requirements and procedures beyond the scope of these *Guidelines*. **In summary, although the thesis chair may provide significant assistance, the final thesis product and the time frame in which it is completed depend upon the engagement of the thesis student (students should allow a minimum of two semesters).**

Responsibilities of the Thesis Student

While different programs have distinct procedures, the following are common elements of the process that all thesis students should understand.

- Select or identify Thesis Chair.

- Work with Thesis Chair to select members of the Thesis Committee.
- Register for thesis work as a specific course(s). The thesis chair will discuss with the thesis student specific course(s) required to complete as a component of thesis work.
- Thesis students must have an approved proposal before registering for Thesis class. Prepare a research proposal prior to conducting research. Format and scope of the thesis proposal depend on the degree program. (See “Thesis Chair Section” of these *Guidelines* for more details.)
- Present a Schedule for Thesis Completion, as part of the thesis proposal to the thesis chair. The schedule should consider personal and professional time limitations. The thesis student should be prepared to complete the thesis in a reasonable and appropriate time framework as determined by the thesis chair. (See Appendix A)
- Apply and gain approval for the thesis research study from the Institutional Review Board or Animal Research Board. (Reference IRB training requirements for certification, see <http://trojan.troy.edu/institutionalreview/index.html>)
- Remain in contact with the thesis chair and other members of the thesis committee while working on the thesis. The thesis student must keep the thesis chair informed of progress, meet with him or her frequently, and inform the chair of any difficulty encountered in research or writing.
- Present to the thesis chair a draft thesis prepared to the best of the student’s ability.
- Incorporate thesis chair’s feedback to improve thesis draft. Expect and allow time for multiple revisions.
- Distribute copies to all thesis committee members after the thesis chair has approved the draft thesis.
- Incorporate thesis committee members’ feedback into the thesis.
- Obtain approval from all thesis committee members on improvements to the thesis draft since last review.
- Schedule thesis defense and notify all thesis committee members of schedule date. (See Chapter 4 of these *Guidelines*).
- Successfully defend thesis.

- Obtain signatures of thesis chair, thesis committee members, department chair (if required by program), and the dean of college on Thesis Acceptance Page (Appendix F).
- Submit a copy of the final thesis draft with original signed cover sheets to the Graduate School. The final thesis draft may be printed on regular printing paper for Graduate School review. The Graduate School will review final thesis draft for adherence to approved format (See Appendix C). The thesis will be returned to the student if format corrections are needed. Corrections must be made and resubmitted to the Graduate School for signature by the Dean of the Graduate School. The student must gain format approval from the Graduate School at least two weeks prior to intended date of graduation.
- Consult with thesis chair on the appropriate number of final theses needed for printing and binding. (A minimum of two copies must be submitted to the Troy University Library for use by the University. The number of copies needed for the department and personal use will vary.)

Printed submissions.

- Submit to the Library the appropriate number of copies of the final thesis printed on 20 pound white bond paper with a 25% or higher rag content (watermark should be visible). Complete thesis binding form (Appendix S) and submit thesis binding fees.
- Obtain a binding receipt from the library after Library checks and accepts thesis and payment.
- Turn in the binding receipt and thesis acceptance page to the Registrar not later than one week prior to the intended date of graduation.

The Thesis Chair

Selecting the Thesis Chair

The thesis student is required to select/identify and reach agreement with a thesis chair who will supervise his or her thesis project. The thesis chair should not have a relationship with the thesis student that poses a potential conflict of interest (e.g., relative, friend, or colleague). The student should consider a number of variables when choosing the faculty member who will act as thesis chair. These should include:

- Evidence of scholarly productivity in the area of the student's research interests.

- Possession of the appropriate terminal academic degree; this is usually the doctoral degree in the field that the thesis student is pursuing.
- Appointment to tenure track and to graduate faculty at Troy University.
- Previous experience in the teaching, thesis committee service, and/or direction of students at the graduate level.
- Individual graduate degree programs/departments (or colleges or schools) may have specific guidelines for faculty who are eligible to serve as thesis chairs. Check with the particular program/department/college/school for compliance.

It is important to understand that the faculty member's decision to serve as a thesis chair is a voluntary one. For this reason the student should search for a thesis chair with at least two faculty members in mind in case one is unavailable to serve as chair. If the student is unable to find any eligible faculty to serve as the thesis chair, then the student will have to abandon the "thesis option" and instead switch to the "non-thesis" option if available.

Role of the Thesis Chair

Service as a thesis chair is a serious time and academic commitment. While the thesis process is driven by student initiative, the role of the thesis chair is significant as he/she serves as the primary adviser to the thesis student. Ideally, the student will remain engaged and work closely with the thesis chair throughout the life of the thesis project.

Responsibilities of the Thesis Chair

While different programs have distinct procedures, there are some important responsibilities common to all thesis chairs.

- Advise student on approved departmental thesis requirements and procedures beyond the scope of these *Guidelines*.
- Assist student in registering for thesis work as a specific course(s).
- Advise the thesis student of various topics to consider in preparing a research proposal.
- Assist student in selection of thesis committee members, completion of Thesis Committee Assignment Form (Appendix B), and appoint replacement committee members when a position is vacated for any reason.

- Approve schedule for thesis completion submitted by the thesis student (Appendix A).
- Approve student's thesis research proposal.
- Advise the thesis student regarding procedures for applying and gaining approval from the Institutional Review Board or Animal Research Board.
- Assist and advise the thesis student on difficulties encountered during research or writing.
- Provide timely feedback on the thesis draft prepared and submitted by the student.
- Review and approve improved thesis draft for distribution to thesis committee members.
- Review and approve thesis draft after the incorporation of thesis committee members' feedback.
- Notify Dean of the Graduate School of scheduled oral thesis defense.
- After format approval from the Office of the Graduate School, advise thesis student on the appropriate number of final theses needed for printing and binding.
- Advise and assist students as needed in completing paperwork on an appropriate schedule for thesis approval and graduation.
- Assign grade for thesis coursework. During the span of working on the Thesis, grades for each thesis research course may be recorded as In-Progress (IP) until the thesis has been approved. Once the thesis is approved and all original signatures are acquired, the thesis chair shall submit a thesis research grade of Pass/Fail (P or F) to the Office of the Registrar for all IP course work.

Change of Thesis Chair*

Should a disagreement arise between the thesis student and the chair of the thesis committee:

- Step 1. The thesis student and thesis chair should attempt to resolve the disagreement informally.

- Step 2. If the issue is not resolved at Step 1 and the thesis student wishes to request a change in thesis chair, the thesis student shall request in writing a conference with the department chair, with a copy to the college dean. His or her request must address the thesis student's concerns and document Step 1 procedures.
- Step 3. Within ten working days of receipt of the request, the department chair shall meet with the thesis student and the thesis chair, either singly or together. If the department chair supports the request for a change, s/he shall assign a new thesis chair; the decision is final; the matter is closed.
- Step 4. In the event a department chair does not feel comfortable (out of discipline or area of expertise) or if the department chair is also the thesis chair, the request shall be forwarded to the college dean for the assignment of a new thesis chair, and this decision is final.

**Note: In the event of a change of thesis chair, the student may or may not be permitted to continue with the same thesis project.*

The Thesis Committee

Selecting the Thesis Committee

The thesis chair, in collaboration with the department chair, will assist the thesis student in selecting the members of the thesis committee. The University prefers members of the thesis committee to be fulltime and hold graduate faculty status. The committee may include a member who is a specialist in the specific area of research, from outside of the University. At least one member of the thesis committee must be from the department granting the degree. The members of the thesis committee should not have a relationship with the thesis student that poses a potential conflict of interest (e.g., relative, friend, etc.). The minimum number of members for a thesis committee is two (including the thesis chair). There is no maximum number. The actual number required is department or program specific.

Role and Responsibility of Members of the Thesis Committee

Members of the thesis committee assist the thesis chair in determining the appropriateness and quality of the thesis study and thesis. While different programs have distinct procedures, there are some important responsibilities common to all thesis committee members. Thesis committee members will:

- Assist the student to improve the quality of the thesis.
- Assist with the editing of the thesis.
- Assist with methodology, statistical analysis, or another area within his/her expertise.
- Review only a clean thesis that has met the approval of the thesis chair.
- Provide the thesis student with feedback in a timely fashion.
- Approve for oral defense the final draft of the thesis after incorporation of all feedback.
- Attend and assess the thesis student's oral defense.

Change in Committee Membership

If a faculty member agrees to serve on a thesis committee, the obligation is for the duration of the project, and it represents a serious professional commitment. In the event that extenuating circumstances require a thesis committee member to request relief from service on a thesis committee, they should frame the request in writing with a brief explanation to the thesis chair who will forward the request through the appropriate campus department chair, to the college dean for review and on to the Office of the Graduate School. If the request is granted, a replacement will be assigned by the thesis chair with the appropriate department chair's consent. The thesis chair will inform the thesis student.

CHAPTER 2: FORMATTING THE THESIS

Thesis Formatting Requirements

The thesis student has the responsibility to present to the thesis chair, for final approval, a well-written manuscript that is free from error. The thesis student is responsible for editing the thesis. If the student needs editorial assistance, assistance should be obtained before the final draft is presented to the thesis chair. Students are warned that preparation of a thesis can be an extremely expensive undertaking. Each thesis student should have a clear understanding in advance with typists, printers, and any agency involved in photographic work or drawings as to the costs involved. The Graduate School will not act as referee in disputes between students and others in such matters.

The student must follow the department's specified publication manual. Should the style manual conflict with the *Thesis Guidelines*, the *Thesis Guidelines* will take precedence. The thesis will be reviewed by the Office of the Graduate School for adherence to thesis formatting requirements.

Examples of Selected Style Manuals

Council of Biology Editors. *Scientific Style and Format: The CBE Manual for Authors, Editors, and Publishers*. Most recent edition. New York: Cambridge University Press.

MLA Handbook for Writers of Research Papers (by Joseph Gibaldi and Walter S. Achtert). Most recent edition. New York: MLA.

American Psychological Association. *Publication Manual of the American Psychological Association* (Most recent edition). Washington: American Psychological Association.

National Association of Social Workers. *Writing for NASW* (Most recent edition). Silver Spring: National Association of Social Workers.

University Press of Chicago. *The Chicago Manual of Style*, most recent edition, Chicago: University of Chicago Press.

Paper, Photocopying, and Quality

The final copy of the thesis to be presented to the library for archival must be 8.5 x 11 inches in size, 20-pound white bond paper with a 25% or higher rag content (watermark

should be visible). Erasable bond or any other paper with a chemically treated surface is not acceptable. The weight and content of the paper must be consistent throughout the thesis. Photocopying is the most satisfactory and economical method of producing additional copies of the thesis. All copies must be free of smudges and blemishes.

Font Formatting

A 12-point Times New Roman font should be used consistently throughout the document. A smaller font size may be used in the tables and figures if its use enables the positioning of a table onto one page. The font size of tables and figures should be no smaller than 8-point and no larger than 14-point. Within a specific table or figure, font size should not vary by more than 4 points.

Word Processing

To be acceptable, the thesis must be a flawless copy that does not contain the following:

- Overstrikes, cross-outs, lines from paste-ups, smudges and smears, erasures, and white-out.
- Photo-mounting, staples, or transparent tape.
- Dots and shading in the background.

Printer Requirements

Letter quality printing must be produced.

Margins

The margins for each page of the thesis including preliminary pages, text, and references must meet the following specifications, measured from the edge of the paper to the text:

Left (binding edge)	1.5 inch*
Right	1 inch

Top	1 inch
Bottom of text	1 inch

**Note: Extra space is needed for binding.*

Margins are inviolable. Footnotes or the last lines of a paragraph or a table must be accommodated without violating the minimum margin of one inch of white space at the bottom.

Holes or perforations are not permitted in any of the margins. Some reproduction or photocopying processes magnify or spread the material and may necessitate more careful attention to the margin spacing. Tabs should be used for a consistent offset at the beginning of each paragraph and should be of uniform spacing (usually five spaces).

Pagination

The pages preceding Chapter 1 must be numbered consecutively in lowercase Roman (i, ii, iii, iv) numerals. Fly (blank) pages that begin each thesis are neither numbered nor counted. Starting with the title page and continuing throughout the thesis, each page must be accounted for and/or numbered. Although the title page is counted, a number is not placed on the title page itself. Numbers on all pages, including the first page of every chapter of the thesis, are placed 0.5 inches above the bottom edge of the sheet and centered. The table in the following section “Parts of a Thesis” contains a detailed listing of the parts of the thesis and indicates whether each is counted or numbered and if numbered, what type of page number it receives.

Spacing

The thesis is double-spaced throughout. Single-spacing is only permitted for quoted material to increase its impact within the text and for tables. Single-spacing may be used for table titles, headings, figure captions, footnotes, and long quotations. References may also be single-spaced within the reference but require two spaces between references, if in accordance with the approved style manual.

Judicious triple- or quadruple-spacing can improve appearance and readability. Such spacing is appropriate after chapter titles, before major subheadings, before footnotes, and before and after tables in the text.

Widows and Orphans

Care should be taken to observe the following rules about widows and orphans. A “widow” is part of a line from the end of a paragraph that is carried to the next page. Adjust the text to eliminate these. An orphan is a line of text or a heading that is left at the bottom of a page without text to follow. Do not leave a heading at the end of a page unless there is room for the heading and at least two lines of text. If there is insufficient room, place the heading on the next page.

Tables, Figures, and Appendices

All tables and figures must fall within the stated margins. Each element of a table or figure must be large enough and sharp enough to be legible. Style of type affects legibility. Initial capitals and lowercase letters generally are easier to read than all capitals, and regular type is easier to read than bold face. The size of lettering should be no smaller than 8-point and no larger than 14-point. Within a specific table or figure font size should not vary by more than four points.

Tables. A table is defined as tabulated numerical data used in the body of the thesis and in the appendices. Tables consist of an arrangement of facts, figures, and values in an orderly sequence usually in rows or columns.

Each table used within the thesis must be well explained within the text. Additionally, the table title should fully explain the table without reference to the text. Explain all abbreviations (except such standard statistical abbreviations as *M*, *SD*, and *df*). Always identify units of measurement.

Each table is given a unique number and a title. The table number and title should be presented above the table. If the title of the table exceeds one line, single space the additional lines. There should be one return line between the table title and the table (See Appendix P). Number all tables with Arabic numbers in the order in which the tables are first mentioned in text, regardless of whether a more detailed discussion of the tables occurs later in the paper. An alternative numbering system reflecting the location or chapter within the thesis may be used for figures or tables, for example, Table 2.1, Table 2.2, Table 2.3, etc., for tables occurring in Chapter 2. When an Appendix contains multiple tables, appendix tables should follow the same pattern, Appendix A.1, A.2, A.3, etc.. Titles of tables should be clear and explanatory and formatted in upper and lower case letters. A

List of Tables is placed separately in the preliminary pages of the thesis after the Table of Contents (See Appendix N).

Figures. A figure is distinctive from a table in that it is defined as all other nonverbal material used in the body of the thesis. Several types of figures may be presented and may include graphs, charts, maps, drawings, photographs, plates, drawings, recording discs, diagrams, etc. When illustrations (photographs, maps, graphs, etc.) are used, they must be digital images or scanned and printed on high resolution printers. The student is required to obtain permission from the artist or publisher to reproduce copyrighted material. Such permission is usually granted on condition that acknowledgment is made. The student is responsible for any fees incurred. Printer glossy prints or darkroom glossy prints may be used, but identical copies must be included in all University required copies.

As a general guideline, plot symbols should be about the size of a lowercase letter of an average label within the figure. Curves on line graphs and outlines of bars on bar graphs should be bolder than axis labels, which should be bolder than the axes and tick marks.

The legend is an integral part of the figure, and should have the same kind and proportion of lettering that appear in the rest of the figure. The legend should appear within the axis area if possible.

Drawings and graphs should be shaded in such a way that they can be reproduced as line art rather than more expensive halftones. Limit the number of different shadings used in one bar graph to two or three. Rather than using fine dot screens to create shades of gray in a bar graph, use pattern of diagonal lines (hatching) or heavier dots (stippling). Diagonal lines produce the best effect.

Photocopies of original photographs must be electronically inserted into the text. A scanner can be used to reproduce photographs. The original image is scanned at a sufficiently high resolution to retain detail and can be incorporated into the thesis document and then photocopied. No more than 3-5% reduction is suggested to prevent indistinct print quality.

Number all figures consecutively with Arabic numerals throughout the body of the thesis and its appendices. Number figures in the order in which they are first mentioned in the text. Figure captions serve both as an explanation of the figure and as a figure title. The caption should be a brief but descriptive phrase. After the descriptive phrase, add any information needed to clarify the figure. Always explain units of measurement, symbols, and abbreviations that are not included in the legend. The figure caption is placed below

the figure (See Appendix P). If the caption of the figure exceeds one line, single space the additional lines. A List of Figures is placed separately in the preliminary pages of the thesis after the Table of Contents (See Appendix O).

Summary for tables and figures.

Titles and captions.

- Titles are the descriptive of tables, while captions are the description of figures.
- Titles and captions are generally one line of type. If the title of the table or caption of the figure exceeds one line, single space the additional lines.
- Every table must bear a number and a title presented above the table. Every figure must bear a number and caption placed below the figure.
- The titles and captions listings in the preliminary pages must be identical in every way to the way they appear with the tables and figures in the body of the text.
- Titles and captions are presented in upper and lower case format.

Preparation.

- Tables and figures must be of professional quality.
- Diagrams, drawings, figures, etc., must be sufficiently clear, sharp, and sized to be easily readable.
- Photographic reduction may be necessary. Not more than 3-5% reduction is suggested to prevent indistinct print quality.
- All tables and figures, including the caption, must meet margin, font and format requirements.
- Photographs should be electronically inserted into the document at a resolution sufficient to retain detail.
- Cross-hatching may be necessary to symbolize color distinctions.

Placement.

- Tables and figures are inserted after, but as near as possible to the text they illustrate or in the appendices.

- Tables and figures of one-half page or less in length may appear on the same page with text. If larger than half-page, they must be placed on their own page.
- Two or more small tables or figures may be placed together on a single page.
- Wide tables or figures may be placed horizontally. The table should be placed so that the top of the table is nearest the 1.5" binding side. The placement of the table or figure, vertical or horizontal, does not alter the position of the page numbering requirements set forth in this guidebook.
- The number of the table and its title are placed above the top line of the table.
- The number of the figure and its caption are placed below the last line or bottom edge of the figure.

Numbering.

- If any table continues on subsequent pages, the caption is not repeated (the top line should read for example, Table 16 (cont'd)).
- The page on which the table/figure appears is numbered consecutively with the main text.
- This page number where the item begins is used in the List of Tables or List of Figures.

Citations of Tables and Figures.

- When making reference to a table/figure in the body of the text, the full word and number should be used, thus: Figure 1.1 or Table 3.1.

Facing Pages.

- Count and number.
- A facing page contains the caption for a table/figure that is too long to be placed on the same page as the table/figure.
- The caption is centered, top to bottom, on the page.
- The number of the table/figure must appear both with the caption and the table/figure.

- Margins for this page are:

Left: 1”

Right: 1.5”*

**Note: Extra space is needed for binding.*

Appendices

An appendix serves the purpose of allowing the author to provide the reader with detailed information that would be distracting to read in the main body of the thesis. Common kinds of appendices include a mathematical proof, a large table, lists of words, a sample questionnaire or other survey instruments used in research, a computer program, etc.

Theses may have more than one appendix. If the thesis has only one appendix, label the cover page “APPENDIX”, centered horizontally and vertically, in all capital letters, and without punctuation. If the thesis has more than one appendix, label the cover page “APPENDICES”, centered horizontally and vertically, in all capital letters, and without punctuation. Do not provide individual cover pages for each appendix when there are multiple appendices. Identify individual appendices with capital letters (Appendix A, Appendix B, etc.) in the right side of the header in the order in which it is mentioned in the main text. Each appendix must have a title. The title is positioned at the upper margin, centered, and in all capital letters. In the case when a single table serves as an appendix, the table title is considered the appendix title, and may be formatted as a table title. In the text, refer to appendices by their labels (i.e., Appendix A). A list of the Appendix or Appendices and corresponding page should be included in the Table of Contents. Please refer to Appendix T for examples of various types of appendices.

Foreign Languages

Theses that involve the extensive use of words (e.g., common phrases, place names, personal names) derived from a foreign language not based on the Latin alphabet (e.g., Chinese, Japanese, Sanskrit, Farsi) should contain a note on transliteration. It is incumbent upon the author to maintain the consistency of spelling styles throughout the body of the thesis.

CHAPTER 3: CONTENT AND ORGANIZATION OF THE THESIS

Parts of a Thesis

Every thesis is composed of three parts:

- Preliminary Pages
- Text Pages
- Reference Material

Preliminary Pages

Fly page (required). The fly page is a blank page at the beginning of the thesis used to protect the work. It is neither counted nor numbered.

Title page (required). The format of the title page must be formatted exactly as shown in Appendix E. The student's name should be spelled exactly as it will be on the diploma. The date on the title page must indicate the month (October, December, March, May or July) and year that the student will actually receive the degree.

The title serves as a guide for others who wish to gain more information about what has been done in the research. Modern search and retrieval systems use the words in the title to locate the work. Consider using key words in the title so that general searches will locate your work. Therefore, it is doubly important to select a title that gives a meaningful and concise description of the contents of the thesis

Summary:

- The title page is counted but not numbered.
- Type the title of the thesis study in capital letters; double space if longer than one line; centered at the top of the page.
- Return 8 lines and type "by".
- Double space and type the student's name, centered, in capital letters, in full as it will appear on the diploma.
- Return 8 lines, type "A THESIS," centered, in capital letters.
- Return 8 lines and type:

Submitted in partial fulfillment of the requirements
for the degree of <INSERT DEGREE TITLE>(e.g., Master of Science, Master of Education)

in <INSERT SPECIFIC AREA> (e.g., Environmental and Biological Sciences, Counseling and Psychology. Do not list concentrations)
in the Graduate School of
Troy University

- Return 10 lines and type MONTH < INSERT OCTOBER, DECEMBER, MARCH, MAY, OR JULY> comma and <INSERT YEAR> of graduation in capital letters. (Only the months of October, December, March, May, or July may be used.)

Thesis acceptance page (required). After all of the corrections recommended by the thesis chair, thesis committee, and the Dean of the Graduate School have been made and the thesis has been successfully defended, the thesis acceptance page must be signed by the thesis chair, the thesis committee members, the chair of the department, the dean of the college, and the Dean of the Graduate School. A Thesis Acceptance Page printed on bond paper with original signatures is required for all bound University copies of theses. A minimum of two bound thesis copies are required by the University. Check with the thesis chair for the number of bound copies recommended or required by specific graduate programs.

Summary:

- The thesis acceptance page is counted but not numbered.
- Type the title of the thesis study in capital letters; double space if longer than one line; centered at the top of the page.
- Return 4 lines and type:

Submitted by <INSERT NAME OF STUDENT> in partial fulfillment of the requirements
for the degree of <INSERT NAME OF DEGREE> (e.g., Master of Science)
in <INSERT DEGREE AREA>
(e.g., Environmental and Biological Sciences, Counseling and Psychology)
in the Graduate School of
Troy University

- Return 4 lines and type centered “Accepted on behalf of the Faculty of the Graduate School by the thesis committee:”

- Return 4 lines, draw a signature line and date line.
 - Return 1 line, type <Insert Name and Degree of Thesis Chair>.
 - Return 1 line, type Chair.
 - Return 2 lines, draw a signature line.
 - Return 1 line and type <Insert Name and Degree of Committee Member>.
 - Repeat the two previous lines so that all committee members' names are included.
 - Return 4 lines, draw a signature line and date line
 - Return 1 line, type <Insert Name of the College Dean>
 - Return 1 line, type "Dean of the <Insert Name of the College>"
 - Return 4 lines, draw a signature line and date line
 - Return 1 line, type "Dianne L. Barron, Ed.D."
 - Return 1 line, type "Associate Provost and"
 - Return 1 line, type "Dean of the Graduate School"
 - Return to bottom line of the page, type <Insert MONTH, YEAR> of the actual graduation date (Only the months of October, December, March, May, or July may be used).
 - Refer to Appendix F for a sample Thesis Acceptance Page.

Abstract (required). The abstract should contain a rationale or justification for the study. Generally, a brief account of the purpose, need, and significance of the investigation is given. Thesis objectives are clearly but concisely stated. The methodology, results, and principle conclusions are summarized.

The abstract of a thesis should fit on one page, be double spaced, and not exceed 250 words. This word limit and the format have been specified so that the abstract will more easily conform to the requirements of thesis abstract databases. The title of the thesis is repeated above the abstract.

Summary:

- The abstract page should be counted but not numbered.
- Type "Abstract" centered one inch from the top of the page.

- Double space and type the title of the thesis study in capital letters; double space if the title extends beyond one line.
- Double space and type the author's name in full as it will appear on the diploma; centered.
- Double space and without indent, begin the text of the abstract.
- The abstract must be double spaced and meet paper and margin requirements.
- The abstract should be a single paragraph with no more than 250 words.
- The abstract must not exceed one page.
- The abstract must not include any figures, illustrations or tables.
- See Appendix G for the format of the Abstract.

Human or animal subjects review form (required). This form is not optional. All students must include a completed Human or Animal Subjects form in the thesis, even if human or animal subjects were not used. The student is responsible for submitting his or her application to the Institutional Review Board (IRB) for approval *before research is begun*. Please access <http://trojan.troy.edu/institutionalreview/index.html> for more information. The thesis chair should ensure that the IRB application is complete and the study design is well explained and adequately protects the rights of participants before signing the IRB application. The Human or Animal Subjects Review form must be reviewed and signed by the thesis chair and the chair of the Troy University Institutional Review Board (IRB). A Human or Animal Subjects Review Form printed on bond paper with original signatures is required for all bound University copies of theses. A minimum of two bound thesis copies are required by the University. Check with the thesis chair for the number of bound copies recommended or required by specific graduate programs. A copy of the Human or Animal Subject Review Form is illustrated in Appendix H.

Copyright page (if applicable). The accepted thesis is the property of Troy University. At least two original copies of the thesis are deposited in the Troy University Library for binding and circulation. The University is to be given credit for material used in the publication of any portion of a thesis used as a direct quotation or as an adoption. Citing Troy University as the address for the publication will be sufficient. Library copies of

theses may not be sent to printers for publication. A thesis may be protected from unauthorized copying by merely inserting a copyright statement. See Appendix I for wording on the copyright page. The student may also register this copyright with the Copyright Office, Library of Congress, Washington, D.C. All data collected as part of federal, state, or private research grants become the property of Troy University.

Summary:

- The copyright page is counted but not numbered.
- If the author intends to apply for a copyright, a copyright page must be inserted immediately following the Human or Animal Subjects Review form.
- The copyright is placed at the bottom of its own page in the following format:

Copyright by
<INSERT FULL LEGAL NAME>
<INSERT Year of publication/graduation

OR

In the event that students do not wish to copyright their thesis, they may, nonetheless, protect their work by adding an author's statement (see example below).

Example:

This thesis may not be reprinted without the expressed written permission of the author.

Dedication (Optional). A heading of "Dedication" should be typed at the top of the page. The Dedication should be brief.

Summary:

- Type "Dedication" one inch from the top of the page.
- Return two line spaces (one double space). Begin typing the text.
- The text must be double spaced and centered on the page.
- If used, it should be brief.
- Pagination sequence begins at this page with small Roman numerals.
- See Appendix J for a sample Dedication.

Acknowledgments (Optional). The heading “Acknowledgments” is typed without punctuation and centered at the top of the page; double space to begin text. Text should be left-justified, double spaced, and in indented paragraph form. Only persons who provided professional help should be acknowledged. The Acknowledgments should be concise and to the point (See Appendix K).

Summary:

- Type “Acknowledgments” centered one inch from the top of the page.
- Double space. Begin typing the text.
- The text must be left-justified, double spaced, and in indented paragraph form.
- Count and number the page, using small Roman numerals.
- See Appendix K for example

Table of contents (Required). The heading, “Table of Contents”, is typed without punctuation and centered one inch from the top of the page. Double space; type “Page” right justified. Single space and begin listing at the left margin three line spaces below the heading. The list should include titles of parts, sections or chapters, and their principal subdivisions. The list contained in the Table of Contents must be worded exactly as division or subdivision is worded in the body of the thesis. The listing of subdivisions should be of consistent detail for all sections of the Table of Contents. See Appendices L and M for example formats.

Summary:

- Type “Table of Contents” in capital letters without punctuation; centered one inch from the top of the page.
- Return two line spaces. Type “Page” right justified in upper and lower case.
- Single space the Table of Contents; begin listing left justified with initial page number of the entry right justified.
- The titles of the chapters or sections, and at least the primary and secondary subdivisions should be listed. They must be worded exactly as they appear in the body of the thesis, and typed in all capital letters.
- Single space within each entry and double space between.

- All material that follows the Table of Contents should be listed; no preceding material is listed.
- The list of tables, plates, figures and abbreviations are listed separately.
- Only the list of Appendices is included in the Table of Contents. (Note: Within the Table of Contents, the section division “Appendices” or “Appendix”. The list of individual appendices are indented and presented in upper and lower case. See Appendix L and M for samples of appropriate formats.
- Count and number page, using small Roman numerals.
- See Appendix L and Appendix M for samples of appropriate formats.

List of tables (Required if tables are presented in thesis). The heading, “List of Tables”, is typed in uppercase and lowercase letters without punctuation and centered one inch from the top of the page. Double space and type “Page” right justified. Single space and begin the List of Tables at the left margin three line spaces below the heading. The table title is single spaced and indented underneath the listed table heading. The table title must be the exact wording as appears in the thesis. Tables must be numbered consecutively throughout the text or alternatively using a system that is a reflection of their location, for example, Tables 3.1, 3.2, 3.3, etc., for tables occurring in Chapter 3. If a table is so long that it continues on multiple pages, list only the page number on which the table number and title may be found. The List of Tables should include all figures presented in the same order as in the thesis text. Refer to Appendix N for example format.

Summary:

- Type “LIST OF TABLES” in capital letters without punctuation and center one inch from the top of the page.
- Return two line spaces. Type “Page” right justified in upper and lower case.
- Single space; type the list of tables left justified with the page number of the table right justified.
- Single space within each table title if necessary, and double space between table entries.
- Include all tables appearing in the thesis in the List of Tables.
- The List of Tables uses the title of the table as it appears above the table.

- Count and number, using small Roman numerals.
- See Appendix N for format.

List of figures (Required in figures are presented in thesis). The heading, “LIST OF FIGURES” without punctuation and centered one inch from the top of the page. Double space and type “Page” right justified. Single space and begin the List of Figures at the left margin three line spaces below the heading. The figure caption is typed single spaced and indented underneath the listed figure heading. The figure captions included in the List of Figures must be listed with the exact wording of the figure caption as it appears in the body of the thesis or its appendices. Figures must be numbered consecutively throughout the text or alternatively using a system that is a reflection of their location, for example, Tables 3.1, 3.2, 3.3, etc., for tables occurring in Chapter 3. The List of Figures should include all figures presented in the same order as in the thesis text. Refer to Appendix O for example format.

Summary:

- Type “LIST OF FIGURES” without punctuation and center one inch from the top of the page.
- Return two line spaces. Type “Page” right justified in upper and lower case.
- Single space; type the list of figures left justified with the page number of the table right justified.
- Captions are indented and single-spaced underneath the figure listing.
- Double space between figure entries.
- Include all figures appearing in the thesis text in the List of Figures and in the same order.
- The List of Figures uses the exact wording of the figure caption presented below the figure in the text or appendices.
- Count and number, using small Roman numerals.
- See Appendix O for format.

List of plates, symbols, abbreviations and/or specialized nomenclature. If necessary to the presentation of the thesis, these lists appear after the Lists of Tables and Figures in the preliminaries using a form or style acceptable to the field of study. The recommended format is identical to the one used for the List of Tables and List of Figures.

Summary:

- Count and number, using small Roman numerals.
- Any form acceptable to the department, college, or style manual may be used.

Text Pages

Each thesis or dissertation must be divided in some manner of logical organization. The customary major divisions are chapters, but it is permissible to divide a thesis or dissertation into sections. Each chapter (or section) must be numbered consecutively using Arabic numerals. The Introduction is generally the first chapter of the thesis.

Introduction. Typically the first chapter (or major division) of the thesis is the Introduction. Its heading format and placement is consistent with that of the other chapter titles. The Introduction should contain a brief statement of the problem under investigation. It should outline the scope, aim, and general character of the research. The Introduction may be the opening statement of the first major division.

Body of the thesis. Each new chapter (or section) must begin on a new page. The chapter number and title (or section number and title) must be in all capital letters separated by a colon (e.g. , CHAPTER ONE: INTRODUCTION) and centered one inch from the top of the page. Title is placed two spaces after colon. A chapter or section title that requires more than one line is to be double spaced.

Any logical means of subdivision within the chapter or section is permissible, but the scheme used must be consistent throughout a chapter (or a section). Some chapters may not require subdivisions, while others may require one or more levels for clear organization. Students should take measures to avoid excessive levels of subdivision.

Summary:

Chapters or Sections should be numbered with Arabic numerals starting with page 1, centered 0.5" from the bottom of the page (The page number itself should be 0.5 inches from the bottom of the page.)

- Type "CHAPTER <INSERT NUMBER>: <INSERT CHAPTER TITLE> in capital letters, without punctuations and centered at the top of the page.
- Double space and begin typing the text.
- See example in Appendix R

Headings. Section headings are in uppercase and lowercase letters. Additionally, they are centered one inch from the top of the page. These are generally organized into sections with each section covering a portion of the thesis topic. Examples may be the headings of the primary pages (e.g., Abstract, Acknowledgments, Table of Contents, References, List of Figures, List of Tables, etc.). If the chapter heading is more than one line, the lines can be of different length and double spaced. The text generally begins two line spaces (one double space) below section headings.

First order headings are in uppercase and lowercase letters, centered, and boldface. Examples include **Introduction**, **Materials** and **Methods**, **Results**, **Discussion**, **Conclusions**, and **Recommendations**.

Second-order headings are typed in uppercase and lowercase letters, boldface, flush with the left margin, and on a separate line. The text begins two spaces below second-order headings. Indent 0.5" for paragraphs, and continue return text flush with left margin.

Third-order headings are typed in uppercase and lowercase letters, boldface, indented 0.5" (in line with the text), and end the heading with a period. Text should follow immediately after the heading (do not start text on the following line).

Fourth-order headings are in uppercase and lowercase letters, boldface, italicized, indented 0.5" (in line with text), and end the heading with a period. Text should follow immediately after the heading (do not start text on the following line). Example: ***Text***.

Fifth-order headings are in uppercase and lowercase letters, italicized, indented 0.5" (in line with text), and end the heading with a period. Text should follow immediately after the heading (do not start text on the following line). Example: *Text*.

The subdivisions within a chapter (or a section) do not begin on a new page unless the preceding page is filled. If there is not (or insufficient) room for the complete heading and at least two lines of type at the bottom of a page (see orphans and widows), the new subdivision should begin on the next page. It is never correct to carry over the last few words of a paragraph. It is preferable to add an extra line, rather than continue a portion of a line.

Summary:

- Count and number all text pages with Arabic numbers.
- All divisions and subdivisions as indicated by headings should be identical to those listed in the Table of Contents.
- The scheme of subdivision within the chapter or section must be consistent throughout the chapter or section.
- Avoid excessive or unnecessary subdivisions.
- Refer to Appendix Q for examples of heading formats.

Glossary, footnotes, and endnotes. Consult the **department's specified style manual** for guidance on the use of glossaries and endnotes.

Reference Material

References or literature cited (Required). Theses that make use of other works, either in direct quotation or by reference of an idea must contain a "References" section listing these sources. The reference list at the end of the thesis provides the reader the information necessary to identify and retrieve each source. Only sources cited in the thesis should be listed in the References section.

Type "References" without punctuation and centered one inch from the top of the page. (Note: The Reference section should NOT have a cover page). Consult with the thesis chair for the departmentally approved format for reference listings. The References section should conform to all font and margin requirements of the thesis.

Bibliography (If appropriate). If pertinent works have been consulted, but not specifically cited in the text, they should be listed separately in a “Bibliography” section. Type “Bibliography” without punctuation; centered one inch from the top of the page (Note: The Bibliography section should NOT have a cover page). Consult with the thesis chair for the departmentally approved format for the reference and bibliography listings. The Bibliography section should conform to font and margin requirements of the thesis and be in the same format as the References section.

Appendices (If appropriate). Some theses will not require this section. It is usually added to contain supplementary illustrative materials, original data, and quotations that are too lengthy for inclusion in the text or not immediately essential to an understanding of the text. See Chapter 2 for more information on Appendices and Appendix T for examples.

Summary:

- A cover page will precede the Appendices. “APPENDICIES” should be centered and printed five inches from the top line.
- The appendices may be divided into Appendix A, Appendix B, etc., depending on the type and amount of material used. Do not include cover pages for individual appendices within the “Appendices” section.
- Type Appendix A (etc.) at the top right corner of the page as the header.
- Each appendix should have a brief descriptive title. In the case where an appendix contains one table, the table title may serve as the appendix title. If the appendix consist of multiple tables or figures, a brief unifying title should be used for the appendix title, and each figure treated as a separate figure and designated with the alternate numbering scheme. For example, two tables in Appendix A, would be identified as Appendix A.1. and Appendix A.2. See Appendix S for example.
- Type the title of the material in capital letters, centered and one inch from the top of the page. If title is more than one line, double space. (Exception: If the appendix title is also a table title, the title should be formatted as a table title.)
- Each appendix and its title should be listed in the Table of Contents. A separate Table of Contents for the Appendices should NOT be included.
- All appendices must meet paper and margin requirements.

- Count and number all pages (including cover page) consecutively.
- Refer to Appendix T for examples.

Curriculum vitae (Required). At a minimum provide full name of student, permanent address, educational degrees, teaching or work experience, and if appropriate, publications (See Appendix U).

Order of Thesis

The table below gives the order in which the various parts of the thesis should appear and indicates whether they are numbered and/or counted.

SEQUENCE	PAGINATION	Page Number Placement	Listed in Table of Contents
Preliminary Pages	Small Roman Numerals		
Fly Page	Uncounted	Unnumbered	No
Title Page	Count/Do Not Number	None	No
Thesis Acceptance Page	Count/Do Not Number	None	No
Abstract	Count/Do Not Number	None	No
Human or Animal Subjects Review Form	Count/Do Not Number	None	No
Copyright Notice	Count/Do Not Number	None	No
Dedication	Count/Number	Bottom/Center	No
Acknowledgments	Count/Number	Bottom/Center	No
Table of Contents	Count/Number	Bottom/Center	No
List of Tables	Count/Number	Bottom/Center	Yes
List of Figures	Count/Number	Bottom/Center	Yes
Key to Symbols or Abbreviations	Count/Number	Bottom/Center	Yes
Text Pages	Arabic Numbers Starting at 1		
Introduction	Count/Number	Bottom/Center	Yes
Body of Thesis (Chapters)	Count/Number	Bottom/Center	Yes
Summary or Conclusions	Count/Number	Bottom/Center	Yes
Recommendations	Count/Number	Bottom/Center	Yes
Reference Material			
Glossary (optional)	Count/Number	Bottom/Center	Yes
Endnotes or Footnotes (optional)	Count/Number	Bottom/Center	Yes
References (required) and Bibliography (optional)	Count/Number	Bottom/Center	Yes
Cover Sheet for Appendices	Count/Number	Bottom/Center	No
Appendices	Count/Number	Bottom/Center	Yes
Curriculum Vitae	Uncounted	Unnumbered	No

Use of Copyrighted Material

The student is required to obtain permission from the author or publishers to quote extensively from copyrighted material. Such permission is usually granted on condition that acknowledgment is made. The student is responsible for any fees associated with using copyrighted material. Permission for the use of all such materials must be obtained before the thesis is submitted for final approval. Contact the Troy Library website for more information on how to obtain copyright permission.

Use of Reprints in Thesis

- Reprints may be used in the body of a thesis if the student is either the first author or has been primarily responsible for the publication. The student must have primary responsibility for the research as well as the preparation and editing of the thesis.
- Reprints must be sufficiently clear and of a size that, when bound, lend themselves to microfilming. Two-sided reprints are not acceptable.
- Such reprints, if used, must constitute only a subsidiary part of the thesis. Their approval as part of the thesis must be secured by an explicit vote of the student's thesis committee.
- Some discussion and/or other documentation in addition to the reprint(s) must be included within the body of the thesis.
- The thesis must contain a suitable preliminary format, which includes the title page, table of contents, and other appropriate preliminary elements. It must also include an introduction and statement of the current status of the area of inquiry, statement of the problem, the methodology (if not in the reprint itself), coherent summation for the thesis and a final reference list or bibliography.
- As noted above, the student has the responsibility to secure permission to use copyrighted material in the thesis.

CHAPTER 4: DEGREE COMPLETION AND FINAL THESIS APPROVAL

The student should obtain, complete, and file the Intent to Graduate packet by the published deadline. In order to graduate, the student must have completed all required coursework and obtain a 3.0 GPA or better. The student should consult the *Graduate Catalog* and his or her academic adviser for specific degree requirements. Students pursuing the “thesis option” with a degree program must be enrolled in a minimum of one semester hour during the semester, term, or summer session in which the degree will be awarded and met thesis research requirements (six semester hours) at the time of graduation. The student must have completed all requirements of the thesis approval process and have been awarded a thesis grade.

The student is responsible for checking the University academic calendar (http://trojan.troy.edu/academic_calendar.html) for relevant deadlines for commencement for the semester in which he or she plans to graduate. The student should recognize that many variables involved in the final approval of the thesis are unpredictable. Given the unpredictable nature of the time required for review and corrections, students should be very conservative in planning a schedule that will allow graduation on the intended date. During the first semester of enrollment in Graduate School the student should prepare a schedule with relevant dates for thesis completion to be reviewed and approved by the thesis chair. The schedule should consider personal and professional time limitations. The thesis student should be prepared to complete the thesis in a reasonable and appropriate time framework as determined by the thesis chair.

Submission of the Final Draft and the Defense

Gaining Thesis Committee Approval

The thesis draft will only be reviewed by the thesis committee after receiving initial approval from the thesis chair. Feedback and suggestions from the thesis committee members should be incorporated until the draft is considered acceptable by all members of the committee. The student should anticipate review by the thesis committee and the incorporation of feedback to consume approximately two to three weeks.

Scheduling a Thesis Defense

When the thesis has been approved by all members of the thesis committee, the student with the approval of the thesis chair will determine the date, time, and site of the oral thesis defense. The thesis chair will notify the Dean of the Graduate School at least one week in advance of the scheduled oral thesis defense. The oral thesis defense must occur at least four weeks before the intended date of graduation/commencement.

Oral Defense of the Thesis

The thesis chair will notify the Dean of the Graduate School at least one week in advance of the scheduled oral thesis defense. The format of the oral thesis defense is determined by the thesis chair, and should be consistent with department policy. If the student does not pass the oral thesis defense, a subsequent oral defense may be scheduled at the discretion of the thesis chair.

In consultation with the thesis chair, the student will prepare and present the appropriate number of Thesis Acceptance Pages printed on bond paper to the thesis committee. Only after the student has successfully defended the thesis will the members of the thesis committee sign the Thesis Acceptance Page(s).

Submission of the Thesis to the Graduate School

The thesis must be reviewed by the Graduate School for adherence to thesis formatting requirements (Appendix C). The student must submit a flawless copy printed on regular paper to the Graduate School (Adams Administration Building, Room 011, Troy campus) for format review. The appropriate number of "Thesis Acceptance Pages" and "Human and Animal Review Forms" printed on bonded paper with appropriate original signatures should be submitted along with thesis. The thesis and other required pages are to be submitted in a "10 x 13" heavy manila envelope with a copy of the title page adhered to the front of the manila envelope. The last date a fully approved thesis may be submitted to the Dean of the Graduate School is three (3) full weeks prior to the date of graduation. **THIS DEADLINE IS NOT NEGOTIABLE.**

Each thesis is reviewed for quality of print and correct formatting. The Graduate School staff also hand counts each page to be sure that no pages are improperly numbered or missing. The Graduate School will either approve the thesis as submitted or return it to

the thesis student for needed format corrections. Should the thesis need format corrections, it is the student's responsibility to make all necessary corrections and resubmit to the Graduate School for final format approval. A single thesis can take anywhere from one to two days to process, depending on its length and the number of errors encountered. Since the Graduate School staff must review many graduate theses each semester, it is suggested that the student allow at least three week's time to obtain Graduate School approval of the thesis.

Submission of Final Copies of Thesis to Library

Upon approval from the Graduate School, the student should consult his or her thesis chair to determine the number of final copies of the thesis that will be required. Final copies of the thesis should be copied on 8.5 x 11 inches, 20-pound white bond paper with a 25% or higher rag content (watermark should be visible).

The student should submit to the Troy University Library (Troy Campus), Serials Department, the required number of final theses along with a completed Troy University Thesis Binding form (See Appendix S), and a check or money order made out to Troy University Library. The Library staff will review the thesis for conformity of quality standards for thesis binding (See Appendix D). The student should retain a copy of the binding fee receipt provided by the Library personnel.

Recording by the Troy University Registrar

At least one week prior to graduation, the student is responsible for delivering a copy of the paid binding fee receipt provided by the Troy University Library personnel and a copy of the Thesis Acceptance Page (Appendix F) with signatures to their home campus Registrar's office (same office that is processing the student's Intent to Graduate). **THIS IS A VERY CRITICAL STEP. IF IT IS NOT ACCOMPLISHED ON TIME, THE STUDENT WILL NOT GRADUATE OR PARTICIPATE IN THE GRADUATION CEREMONY THAT SEMESTER.**

Distributing Copies of the Thesis

Assuming that the student has met all of the degree requirements, including paying his/her fees for thesis binding at least one week prior to graduation, the Troy University Library will have copies of the thesis bound. It is the student's responsibility to distribute all additional copies to the appropriate persons or locations.

APPENDICES

SCHEDULE FOR THESIS COMPLETION

Student's Name: _____

Fill in the appropriate dates to complete thesis by date of intended graduation.

First Semester After Admission to Graduate Program _____	Select thesis chair and thesis committee. Submit Thesis Committee Assignment Form (Appendix B) Become thoroughly familiar with <i>Thesis Guidelines</i> . Discuss with thesis chair potential thesis research topics. Present a schedule for thesis completion to the thesis chair.
Second Semester of Graduate Coursework	Prepare written thesis research proposal.* Gain thesis chair approval of thesis research proposal.
One Semester prior to Graduation _____	Enroll in thesis course work as advised by thesis chair. File Intent to Graduate with home campus registrar by the announced deadline. Begin data collection and writing of thesis.
Semester of Intended Graduation _____	Enroll in thesis course work as advised by thesis chair. Write and format thesis to the best of student's ability.
At least 10 weeks prior to Graduation	Submit draft thesis to thesis chair. Incorporate into the draft thesis all thesis chair suggestions and make necessary corrections.
At least 7 weeks prior to Graduation _____	Thesis chair approves draft thesis. Distribute copies of thesis chair approved draft thesis to thesis committee members. Incorporate feedback from thesis committee in to the draft thesis.
At least 5 weeks prior to Graduation _____	Thesis committee members approve final thesis draft. Schedule Oral Thesis Defense. Dean of Graduate School notified of scheduled oral thesis defense. Consult with chair for the number of required final copies of thesis, and prepare that number of Thesis Acceptance pages (on bond paper).
At least 4 weeks prior to Graduation	Successfully defend thesis. Obtain thesis chair, committee members', department chair and dean of college signatures
At least 3 weeks prior to Graduation _____	Submit committee accepted thesis with copies of Thesis Acceptance page to Graduate School. Make any corrections needed, resubmit. Thesis approved by Graduate School. Copy appropriate number of approved thesis.
At least 2 weeks prior to Graduation _____	Submit required number of final copies, completed Thesis Binding Form, and money to Library.
At least 1 week prior to Graduation _____	Submit Thesis binding fee receipt and copy of Thesis Acceptance page to Troy University Registrar
Graduation _____	

*Note: Consult with specific department to determine deadline requirements for the Research Proposal. Requirements vary.

TROY UNIVERSITY
THESIS COMMITTEE ASSIGNMENT FORM

_____	_____
(Student Name)	(Student ID#)
_____	_____
(Graduate Program)	(Date)

The following graduate faculty members by their signatures have agreed to serve on my thesis committee:

Chair:	_____	_____
	Type or Print Name	Signature
Member:	_____	_____
	Type or Print Name	Signature
Member:	_____	_____
	Type or Print Name	Signature
Member:	_____	_____
	Type or Print Name	Signature
Member:	_____	_____
	Type or Print Name	Signature

(Please Type or Print) Name of Department Chair or Program Director

Approved: _____
(Signature of Department/Division Chair or Program Director) (Date)

Approved: _____
(Signature College Dean) (Date)

Approved: _____
(Signature of Dean/Associate Dean of Graduate School) (Date)

Submit original to: Dr. Dianne Barron
Dean of the Graduate School
11 Adams Administration Bldg.
Troy, AL 38082
(334) 670-3189

Graduate School Thesis Checklist

When a thesis is submitted to the Graduate School*, it will be reviewed to verify proper formatting. Any needed corrections will be noted on this check list and returned to the student. (Student is not responsible for providing this form to the Graduate School.)

Checker's Initials _____

Date _____

- _____ Thesis Acceptance Page (bond paper with signatures)
- _____ Human or Animal Subjects Review Form (bond paper with signatures)
- _____ Title Page
- _____ Abstract
- _____ Format of Optional Preliminary pages
- _____ Citing Troy University as the address for the publication
- _____ Numbering and Format of Tables and Figures
- _____ Table of Contents
- _____ Format of all Lists / Appendices
- _____ Pagination
- _____ Margins
- _____ Consistent format of Reference / Citations
- _____ Quality of Copy / Darkness of Print
- _____ Sequence of Page Numbering
- _____ Vitae

****Note: The last date a signed fully-approved thesis may be submitted to the Dean of the Graduate School is three (3) full weeks prior to the date of graduation. THIS DEADLINE IS NOT NEGOTIABLE.***

Library Thesis Checklist

When a thesis is submitted to the Library, it will be reviewed to verify proper compliance to quality standards for thesis binding. The library will not accept theses that do not conform to these standards. (Student is not responsible for providing this form to the Library.)

Checker's Initials _____

Date _____

- _____ Thesis Acceptance Page (with original signatures)
- _____ Human or Animal Subjects Review Form (with original signatures)
- _____ All pages printed on #20 bond, 25% or higher rag content paper with watermark visible
- _____ Paper of uniform weight and color
- _____ Correctly completed Thesis Binding Form submitted
- _____ Paid appropriate binding fee
- _____ Issued Binding fee receipt

DEVELOPMENT AND VALIDATION OF AN INVERTEBRATE COMMUNITY INDEX
(ICI) FOR WADEABLE STREAMS OF THE CHOCTAWHATCHEE-PEA RIVERS
WATERSHED IN SOUTHEAST ALABAMA

by

HOLLY H. BENNETT

A THESIS

Submitted in partial fulfillment of the requirements
for the degree of Master of Science
in Environmental Analysis and Management
in the Graduate School of
Troy University

TROY, ALABAMA

MAY, 2002

DEVELOPMENT AND VALIDATION OF AN INVERTEBRATE COMMUNITY INDEX
(ICI) FOR WADEABLE STREAMS OF THE CHOCTAWHATCHEE-PEA WATERSHED
IN SOUTHEAST ALABAMA

Submitted by Holly H. Bennett in partial fulfillment of the requirements
for the degree of Master of Science
in Environmental Analysis and Management
in the Graduate School of
Troy University

Accepted on behalf of the Faculty of the Graduate School by the thesis committee:

Allen C. Stone, Ph.D.
Chair

Date

Lynn S. Stevens, Ph.D.

Stewart B. Mitchell, Ed.D.

John Jones, Ph.D.
Chair Department of Biology
Troy Campus

Bill Richardson, Ph.D.
Dean, College of Arts and Sciences

Dianne L. Barron, Ed.D.
Associate Provost and
Dean of the Graduate School

Date

Source: Holly H. Bennett, "DEVELOPMENT AND VALIDATION OF AN INVERTEBRATE COMMUNITY INDEX (ICI) FOR WADEABLE STREAMS OF THE CHOCTAWHATCHEE-PEA WATERSHED." Master of Science in Environmental Analysis and Management, Troy University, Troy, Alabama, May 2002.

Abstract**DEVELOPMENT AND VALIDATION OF AN INVERTEBRATE COMMUNITY INDEX
(ICI) FOR WADEABLE STREAMS OF THE CHOCTAWHATCHEE-PEA WATERSHED IN
SOUTHEAST ALABAMA****Holley H. Bennett**

Activities such as agriculture, silviculture, and mining contribute nonpoint pollution to Alabama's streams through polluted runoff and habitat alteration. The Choctawhatchee-Pea watershed in southeast Alabama lies entirely in the coastal plains ecoregion. The highly erodible soils characteristic of this region, combined with row crop agriculture and clearcutting have degraded habitat and contributed large amounts of sediment to streams. Biological monitoring may be the most appropriate means of detecting pollution effects on aquatic communities, and development of biological criteria is important for the establishment of enforceable laws regarding nonpoint source pollution. Macroinvertebrates were collected from 49 randomly selected sites from first through sixth-order streams in the Choctawhatchee-Pea watershed. Samples were transported to the laboratory for processing and identification to genus level. Thirty-eight candidate metrics were examined, and the index was calibrated by eliminating metrics that failed to separate impaired from unimpaired streams. Each site was scored with those metrics, and narrative scores were assigned based on ICI scores. Least impacted sites scored significantly lower than sites impacted by row-crop agriculture, cattle, and urban land uses. Conditions in the Choctawhatchee-Pea watershed suggest that the entire area has experienced degradation through past and present land-use practices.

HUMAN OR ANIMAL SUBJECTS REVIEW FORM
for

Name of Student

Title of Research Project

This research project has been reviewed by the Institutional Review Board and approved as follows (the appropriate block must be checked by either the Thesis chair or the Chair of the Institutional Review Board):

- Neither humans nor animals** will be used and this research is certified exempt from Institutional Review Board review by the thesis committee chair.
- Human participants** will be used and this research is certified exempt from Institutional Review Board review by the Chair of the Institutional Review Board.
- Human participants** will be used and this research was reviewed and is approved by the Institutional Review Board.
- Animal participants** will be used and this research was reviewed and is approved by the Animal Research Review Board.

Signature of Thesis Committee Chair

Date

Signature of Chair of Institutional Review Board

Date

Copyright by*
ROBERT JOHN SMITH
2020
OR

This thesis may not be re-printed without the expressed written permission of the author.

** Please refer to “Copyrighting the Thesis” to determine property ownership.*

Dedication

This thesis is dedicated to my husband John Stevenson and my parents John and Anne Williamson for their support and encouragement throughout my graduate study.

Acknowledgements

I owe a debt of gratitude to many people who have helped me along the way to completion of this project. Foremost, I would like to thank Dr. A. Washington for inviting me to be part of this University research project and for locating the funding necessary to complete this project.

I would also like to thank my committee members for their substantial contributions to my thesis. I especially thank Dr. L.C. Leberman for his exceptional assistance with the statistical design of this project.

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	iv
LIST OF FIGURES	v
LIST OF SYMBOLS AND ABBREVIATIONS	vi
CHAPTER ONE: INTRODUCTION.....	1
Statement of the Problem or Purpose.....	5
CHAPTER TWO: LITERATURE REVIEW	10
Scheduling and Enrollment	11
Performance.....	25
Statement of Hypothesis.....	32
Summary.....	33
CHAPTER THREE: MATERIALS AND METHODS <u>OR</u> PROCEDURE.....	35
Subjects of Population.....	36
Instrumentation	39
Procedure.....	41
Research Methods and Procedures	45
Data Analysis.....	47
CHAPTER FOUR: RESULTS AND DISCUSSION	58
CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	84
REFERENCES	98
APPENDICES.....	100
Appendix A: Cover Letter	101
Appendix B: Survey Instrument for Performance	102
Appendix C: Data Report	106
Appendix D: Glossary	118

[Traditional Example]

TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
LIST OF FIGURES.....	viii
LIST OF ABBREVIATIONS.....	ix
ABSTRACT.....	x
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: STRUCTURAL AND FUNCTIONAL EFFECTS OF EPISODIC VERSUS CONTINUOUS TOXICANT APPLICATION ON PERIPHYTON COMMUNITIES	7
Introduction	7
Materials and Methods.....	10
Results.....	12
Discussion	15
Conclusions	18
CHAPTER 3: STRUCTURAL AND FUNCTIONAL EFFECTS OF NICKEL AND ZINC ON PERIPHYTON COMMUNITIES	28
Introduction	28
Materials and Methods.....	31
Results.....	34
Discussion	38
Conclusions	40
CHAPTER 4: SUMMARY AND CONCLUSIONS	59
LIST OF REFERENCES.....	61
APPENDICES	
Appendix A: Episodic versus Continuous Date.....	67
Appendix B: Nickel-Zinc Data.....	117

[Scientific Example]

LIST OF TABLES

	Page
Table 1.1	32
Detailed site location information for 49 sites sampled in the Choctawhatchee-Pea watershed April-May, 2001.	
Table 2.1.....	35
Candidate metrics for development of an ICI for the Choctawhatchee-Pea watershed in southeast Alabama including expected response to increasing pollution.	
Table 2.2.....	36
Habitat and water quality variables that correlated with individual metrics including correlation coefficient (r) and significance (p).	
Table 2.3.....	38
List of metrics selected for index development including description, response to increasing disturbance, and references to other studies.	
Table 2.4.....	39
The ICI classification, total ICI scores, integrity classes, and attributes of the macroinvertebrate assemblage.	
Table 2.5.....	40
ICI and descriptive scores for 45 sites in the Choctawhatchee-Pea watershed sampled April-May, 2001.	
Table 2.6.....	42
List of habitat and water chemistry variables that correlate to ICI score using Spearman's correlation including correlation coefficient (r) and significance (p).	
Table 2.7.....	43
ICI descriptive score, ADEM descriptive score, and EPT metric score for nine sites in the Choctawhatchee-Pea watershed.	

Source: Holly H. Bennett, "DEVELOPMENT AND VALIDATION OF AN INVERTEBRATE COMMUNITY INDEX (ICI) FOR WADEABLE STREAMS OF THE CHOCTAWHATCHEE-PEA WATERSHED." Master of Science in Environmental Analysis and Management, Troy University, Troy, Alabama, May 2002.

LIST OF FIGURES

	Page
Figure 1	44
Map of the Choctawhatchee-Pea watershed in southeast Alabama with 49 sites sampled April-May, 2001.	
Figure 2	45
Scatterplot of the number of EPT taxa vs. Log ₁₀ catchment area and placement of criteria lines.	
Figure 3	45
Scatterplot of the number of Trichoptera taxa vs. Log ₁₀ catchment area and placement of criteria lines.	
Figure 4	46
Scatterplot of the number of Crustacea and Mollusca taxa vs. Log ₁₀ catchment area and placement of criteria lines.	
Figure 5	46
Scatterplot of the number of Diptera taxa vs. Log ₁₀ catchment area and placement of criteria lines.	
Figure 6	47
Scatterplot of percent dominant taxa vs. Log ₁₀ catchment area and placement of criteria lines.	
Figure 7	47
Scatterplot of percent Ephemeroptera individuals vs. Log ₁₀ catchment area and placement of criteria lines.	
Figure 8	48
Scatterplot of percent diptera individuals vs. Log ₁₀ catchment area and placement of criteria lines.	
Figure 9	48
Scatterplot of percent Chironominae individuals to Chironomidae vs. Log ₁₀ catchment area.	
Figure 10	49
Scatterplot of percent shredder individuals vs. Log ₁₀ catchment area and placement of criteria lines.	

Source: Holly H. Bennett, "DEVELOPMENT AND VALIDATION OF AN INVERTEBRATE COMMUNITY INDEX (ICI) FOR WADEABLE STREAMS OF THE CHOCTAWHATCHEE-PEA WATERSHED." Master of Science in Environmental Analysis and Management, Troy University, Troy, Alabama, May 2002.

Sample Table and Figure Format

[Sample Table]

Table 1. Narrative categories used to prioritize unpaved road stream crossings in the Choctawhatchee watershed in southeast Alabama with the Sedimentation Risk Index. The number and percent of crossings scored in the Choctawhatchee watershed with the index are listed for each category.

Condition	Score	Erosion Risk	# of Sites	% of Sites
Excellent	55-60	Low	0	0.00
Good	46-54	Low	17	20.73
Fair	37-45	Moderate	37	45.12
Poor	25-36	High	26	31.71
Very Poor	12-24	High	2	2.44

[Sample Figure]

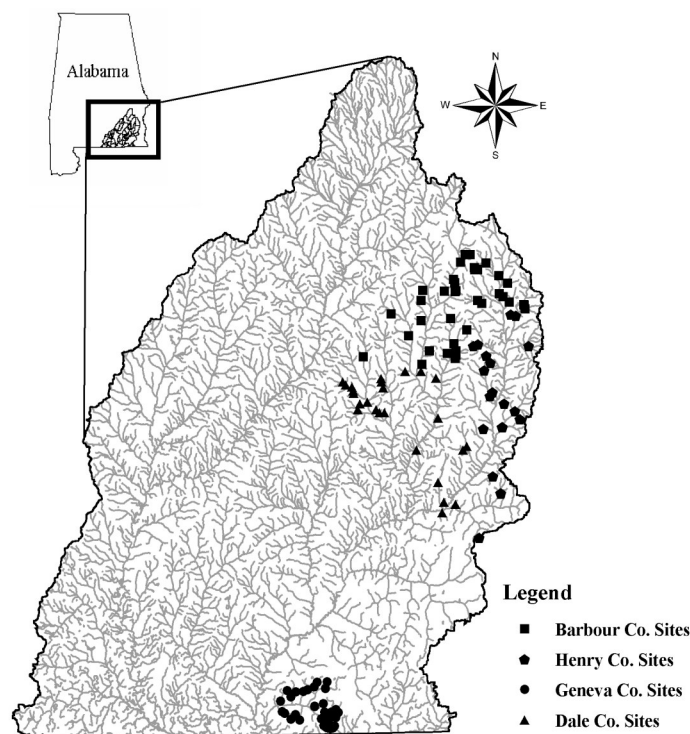


Figure 1. The Choctawhatchee watershed in southeast Alabama showing 125 unpaved road stream crossings surveyed across four counties.

Source: Witmer, P.L. 2007. DEVELOPMENT AND USE OF A SEDIMENTATION RISK INDEX FOR UNPAVED ROAD STREAM CROSSINGS IN THE CHOCTAWHATCHEE WATERSHED. Masters of Science. Thesis, Troy University, Troy, Alabama.

Sample First-Order Heading

Section or Chapter headings are in all uppercase and lowercase letters and centered. These are generally organized into sections with each section covering a portion of the thesis topic. Examples may be the headings of the primary pages (e.g. Abstract, Acknowledgments, Table of Contents, List of Figures, List of Tables) or, as in the body of the thesis, the **Introduction, Materials and Methods, Results, Discussion, Conclusions, Recommendations**, and References. Except for References, the other headings in the body of the thesis are boldface. If the section heading is more than one line, the lines can be of different length and double spaced. However, chapter headings should be in all caps (e.g. CHAPTER 1: INTRODUCTION). Begin the first paragraph of the chapter text two spaces below the first order heading.

Second-Order Headings

Second-order headings are typed in uppercase and lowercase letters, boldface, flush with the left margin, and on a separate line. The text begins two spaces below second-order headings. Indent five spaces for paragraphs, and continue return text flush with left margin.

Third-order headings. Third-order headings are typed in **lowercase** letters, boldface, indented (.5”), and end the heading with a period. Begin body text after the period.

Fourth-order headings. Fourth-order headings are typed in lowercase letters, boldface, italicized, indented (.5”), and end the heading with a period. Begin body text after the period.

Fifth-order headings. Fifth-order headings are typed in lowercase letters, italicized, indented (.5”), and end the heading with a period. Begin body text after the period.

The subdivisions within a chapter (or a section) do not begin on a new page unless the preceding page is filled. If there is not room for the complete heading and at least two lines of type at the bottom of a page, the new subdivision should begin on the next page. It is never correct to carry over the last few words of a paragraph. It is preferable to add an extra line, rather than continue a portion of a line.

CHAPTER 1: INTRODUCTION

Begin the first line of the thesis two spaces below the Chapter Title. The chapter or section could be simply the chapter or section title. However, if chapter or section numbers are used, use a hyphen and two spaces to separate the chapter or section number from the chapter or section title.

Note: If you use a colon to separate Chapter 1 and the title make sure you use a colon for separation in the Table of Contents.

THESIS BINDING FORM

(Submit with the appropriate number of signed copies to be bound)

TO: Troy University Library
 Attn: Serials Department
 Wallace Hall
 Troy, AL 36082
 Phone: (334) 670-3252
 Email: <https://library.troy.edu/> or dernsberger@troy.edu or jslay@troy.edu

DATE: _____

FROM: _____
 Last Name, First Name Middle Initial

STUDENT NUMBER: _____

STUDENT EMAIL: _____

THESIS TITLE: _____

UNBOUND COPIES TO BE SUBMITTED BY STUDENT:

# Submitted	For use by:
2	Troy University Library (Required)
1	Branch Library (Required for Global Campus sites only)
_____	Thesis Chair, Department, or Committee Members (Optional - Verify number requested)
_____	Student Personal Use

_____ Total copies to be bound

Cost (payable in advance) equals total copies _____ (X) \$20.00 each = \$ _____

Plus shipping /handling charges for Personal Use copies of \$5.00 each volume \$ _____

(Cost is valid for shipping within the continental United States only.)

TOTAL COST: \$ _____

Enclose payment in full. Check or money orders only. Make payable to **Troy University.**

_____ Mail bound copies (other than library copies) to: _____ Please call the student to pick up.
 (Note: This address must be good for at least a period of 4 months.)

 _____ Telephone: _____

Central Library Information

_____/_____

Date Received by Library / Signature of Person Receiving Original Copies

_____/_____

Date Copies Returned for Distribution / Signature of Person Receiving & Mailing Bound Copies

SAMPLE APPENDICES

Appendix T.1. Example format of an appendix consisting of a single table.

Appendix A

Appendix A. Sampling sites in the Little Choctawhatchee River watershed in southeast Alabama with location descriptions and GPS coordinates.

Site	River/Tributary	Location	Latitude	Longitude
1	Little Choctawhatchee River	4.3 km west on US-84 from the intersection of AL-123 and US 84	31°15'44 N	085°40'07W
2	Little Choctawhatchee River	West 1.8 km from the intersection of AL-123 and US-84, north 2.7 km on Power Dam Rd (CR-71/121)	31°16'23 N	085°38'52W
3	Little Choctawhatchee River	North 5.8 km on AL-123 from the intersection of AL-123 and US-84	31°16'23 N	085°37'11W
4	Little Choctawhatchee River	East 5.6 km on US-84 from the intersection of AL-123 and US-84, north 2.3 km on CR-9	31°15'49 N	085°34'13W
5	Unnamed Tributary	East 5.6 km on US-84 from the intersection of AL-123 and US-84, north 3.2 km on CR-9, east 0.5 km on CR-63	31°16'23 N	085°33'53W
6	Bear Creek	East 9 km on US-84 from the intersection of AL-123 and US-84	31°14'17 N	085°32'22W
7	Little Choctawhatchee River	East 10.1 km on US-84 from the intersection of AL-123 and US-84, north 1.8 km on N Bay Springs Rd/CR-49	31°15'08 N	085°31'47W
8	Newton Creek	East 12.2 km on US-84 from the intersection of AL-123 and US-84	31°14'20 N	085°30'09W
9	Harrison Mill Creek	South 2.1 km on Brannon Stand Rd/CR-59 from the intersection of US-231 and Brannon Stand Rd /CR-59	31°17'23 N	085°29'17W
10	Little Choctawhatchee River	South 7.4 km on Brannon Stand Rd/CR-59 from the intersection of US-231 and Brannon Stand Rd /CR-59	31°14'45 N	085°28'58W
11	Beaver Creek	West 0.2 km from the west intersection of Ross Clark Circle/AL-231 and US-84, south 1.4 km on Honeysuckle Rd	31°12'54 N	085°26'06W
12	Quail Creek/Little Choctawhatchee River	East 5.5 km on Mance Newton Rd/CR-10 from the intersection of CR-10 and US-231	31°17'13 N	085°25'09W

Appendix T.2. Example format for an appendix consisting of two or more tables or figures.

Appendix B

EVALUATION OF NINE SITES IN
LITTLE CHOCTAWHATCHEE RIVER WATERSHED

Appendix B.1. Qualitative Habitat Evaluation Index Scores of Nine Sites in the Little Choctawhatchee River Watershed

Qualitative Habitat Evaluation Index								
Site	Substrate	Instream Cover	Channel Morphology	Riparian Zone	Pool/glide Quality	Riffle/run Quality	Total Score	% Canopy Open
1	11	10	13	9.5	8	5	56.5	85
2	9	11	11	7.5	9	4	51.5	85
3	12	8	14	10	8	7	59	50
4	6	7	6	9	8	2	38	95
5	5	8	12	9	6	0	40	50
6	11	15	12	8.5	9	6	61.5	97
7	6	10	18	10	10	5	59	40
8	9	16	12.5	9.5	11	6	64	30
9	6	6	17	8	6	2.5	45.5	40

Appendix B.2. Rapid Bioassessment Protocol Scores of Nine Sites in the Little Choctawhatchee River Watershed

Rapid Bioassessment Protocol														
Site	Epifaunal Substrate	Pool Substrate	Pool Variability	Sediment Deposition	Channel Flow Status	Channel Alteration	Channel Sinuosity	Left Bank Stability	Right Bank Stability	Left Bank Vegetation	Right Bank Vegetation	Left Bank Riparian Zone	Right Bank Riparian Zone	Total score
1	11	11	9	8	11	15	12	5	8	4	4	10	10	118
2	6	10	9	8	11	11	6	2	3	2	2	9	10	89
3	6	7	6	10	17	13	10	6	6	4	5	10	10	110
4	3	8	2	6	15	13	1	5	5	4	4	10	10	85
5	9	9	10	4	8	17	12	5	5	3	3	10	10	105
6	11	16	13	18	19	9	2	10	10	9	9	4	10	140
7	15	13	12	12	16	19	17	9	8	8	9	10	10	158
8	15	13	12	18	15	11	12	7	7	7	7	10	10	144
9	3	11	9	7	9	19	11	5	5	4	4	10	9	106

VITAE

Name of Author: Jane S. Doe
Address: 1234 Stevens Street
Smithville, Alabama 23456
Telephone Number: (334) 123-4567

EDUCATION

Master of Science in Education – Troy University, Troy, Alabama, 2013.
Major: Curriculum and Instruction (Mathematics)

Bachelor of Science in Education – The University of Texas, Austin, Texas, 2011.
Major: Mathematics & History

EMPLOYMENT OR TEACHING EXPERIENCE

Internship, 2010 Pike County Schools. Interned in seventh grade classroom for 15 weeks. Taught eight three hour lessons, set-up grade books and prepared lesson plans for supervising teacher.

Student teaching, 2011 Troy City High School. Student taught for 15 weeks in a Tenth grade classroom. Provide additional information regarding the student teaching experience.

Secondary Education Teaching, 2011 to present.. Have taught Seventh, Eighth, and Ninth grade mathematics, Algebra I, and United States History.

PUBLICATIONS

“The Application of Patterns in the Teaching of Basic Mathematical Concepts.” 2013. Published Thesis.