GUIDE TO THE PREPARATION OF THESES AND DISSERTATIONS

Tenth Edition, 2003

The Office of Graduate Studies
The University of Tennessee, Knoxville

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ABSTRACT

The *Guide* will discuss the formatting standards set forth by the Office of Graduate Studies at The University of Tennessee, Knoxville. The *Guide* is divided into five chapters which explain in detail the formatting requirements and submission options to be followed by all graduate students writing a thesis or dissertation at The University of Tennessee, Knoxville.

PREFACE

For those familiar with the previous edition of the *Guide*, much of this document will look the same. The reason for the existence of a cohesive formatting standard is to present the document in a manner that is easy to read and logically organized so that specific information is readily accessible, and to ensure continuity in formatting from discipline to discipline. The most notable changes from the previous edition of the *Guide* are the inclusion of information about the use of Internet links in theses/dissertations and instructions for creating double-sided paper copies of theses/dissertations.

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CHAPTER I INTRODUCTION AND GENERAL INFORMATION

Purpose of the *Guide*

The Guide is designed to be the basic source of information for thesis/dissertation preparation at The University of Tennessee, Knoxville. It establishes the technical parameters within which all students must work (regardless of electronic or paper submission), such as margin settings, spacing, format and style, the sequence of pages within the document, submission options, and items required for final submission. When applicable, alternate format standards are listed here for electronic submission. Since most graduate students will publish during and after their graduate education, it is logical to encourage the use of leading professional publications to help establish specific formatting conventions. Students are encouraged to use publications within their field, such as journals and textbooks, to assist them in establishing heading format, bibliographic form, and other conventions that are discipline oriented. The application of this concept is not simple, however. It becomes necessary for students to understand the various elements of a manuscript and general publication formatting requirements in academic publishing. Although knowledge and use of publication formatting is essential, the regulations established by the *Guide* always take precedence over any other style manuals for final submission of a thesis/dissertation.

Style manuals such as the MLA Handbook for Writers of Research Papers, Publication Manual of the American Psychological Association, A Manual for Writers of Term Papers, Theses, and Dissertations, and/or The Chicago Manual of Style should also be used as resources for basic style and grammar. In contrast, previously accepted theses and dissertations should never be used as the final guide for formatting. Examples taken from other theses may be out of context or may be incorrect. The existence of a particular style or usage in a previously accepted thesis does not establish precedent for its continuation.

The University of Tennessee, Knoxville, by accepting a thesis or dissertation and awarding the degree, places its academic reputation on the line. While the technical quality and content of a thesis or dissertation is evaluated by the graduate committee, the Office of Graduate Studies imposes format requirements to ensure an appropriate academic appearance of the manuscript.

Background Information

The commitment of the Office of Graduate Studies at The University of Tennessee, Knoxville, has always been to assist graduate students and faculty members

in meeting the goals of consistency, logical organization, attractiveness and correctness in thesis/dissertation preparation. The Office of Graduate Studies is responsible for the review and approval of the final copies of the thesis or dissertation and provides guidance in document preparation through this *Guide* and the assistance of the Thesis/Dissertation Consultant

The Office of Graduate Studies offers help to students and the faculty and staff who work directly with students preparing theses and dissertations. Each term, workshops are held to provide formatting guidance. Moreover, formatting and general submission information can be obtained at any time by visiting the Thesis/Dissertation website at http://web.utk.edu/~thesis. Students are encouraged to see the Thesis/Dissertation Consultant early in the process, as they begin to format their documents, or as questions about technical preparation arise. Eventually, students must work with the Thesis/Dissertation Consultant for format reviews and for the final submission of the document. Students may contact the Consultant via phone or e-mail to make an appointment to bring their rough drafts to the Consultant, who will discuss needed revisions for acceptable format. Out of town students may mail draft copies of their document to the Consultant for formatting revisions or may contact the Consultant and make arrangements to send a copy as an e-mail attachment. After completion of the Final Examination/Defense of Thesis/Dissertation, when all committee corrections have been made and the student feels the document is ready for final submission to the Office of Graduate Studies, the Consultant will check the final draft of the thesis/dissertation so that all formatting errors can be found and corrected before final submission.

Student Integrity

In part, and very importantly, conferral of a degree implies personal integrity and ability to perform within the framework of scholarly methods. There are three areas in which graduate students should be particularly cautious: [1] proper acknowledgment of cited works; [2] use of copyrighted material; and [3] proper reporting of work subject to federal compliance regulations (e.g., use of human subjects, animal care, radiation, legend drugs, recombinant DNA, or the handling of hazardous materials).

Proper Acknowledgment of Cited Works

Students must take care not to plagiarize. "Plagiarism is using the intellectual property or product of someone else without giving proper credit" (*UT Graduate Catalog*, 2002-2003, pg. 19). Any material taken from another source must be fully acknowledged, and in no case should one present another person's work as one's own. Extreme caution should be exercised by students involved in collaborative research to avoid questions of plagiarism. If in doubt, students should check with their major professor and the Consultant about the project. Plagiarism will be investigated when suspected and appropriate action taken if necessary.

The Use of Internet Links (Embedding)

Students may use links in their document as long as they do not give the impression that the material linked to is their own. Students should ask permission to include a link to external material. If they do not receive permission, they may provide the address (URL) without providing the link. Students should use discretion in including links because the content of websites frequently changes, unlike published journal articles or books. Students should not link to material that is integral to their thesis/dissertation. They should instead seek permission to include that material in their thesis/dissertation.

The Use of Copyrighted Material

The law governing copyright infringement is based on a principle called "fair use." If copyrighted material is used in a limited way, permission to quote usually need not be sought. Also, "no permission is needed to quote works in the public domain... such as publications of the United States Government" (*Chicago Manual of Style*, 1993, pg. 144). Unlike other material, a standardized test, figure, table or other graphical representation should not be reprinted in the thesis/dissertation unless permission has been granted. The source must be cited under the table/figure if permission is granted (*APA*, 2001, pg. 174). If extensive material from a copyrighted work is to be used, such that the rights of the copyright owner may be violated, permission from the owner must be obtained. Even when permission is not needed, make sure to cite the owner's works fully. In determining the extent of a written work that may be quoted without permission, the student should consider the proportion of the material to be quoted in relation to the substance of the entire work. According to *The Chicago Manual of Style* (1993):

Use of any literary work in its entirety—a poem, an essay, a chapter of a book—is hardly ever acceptable. Use of less than the whole will be judged by whether the second author appears to be taking a free ride on the first author's labor....Proportion is more important than the absolute length of a quotation; to quote five hundred words from an essay of five thousand is likely to be more serious than from a work of fifty thousand (pg. 146).

The publisher usually has the authority to grant permission to quote excerpts from the copyrighted work or can refer requests to the copyright owner or designated representative. The copyright owner may charge for permission to quote. Permissions should be credited on the acknowledgments page, and the source should appear in the list of references/bibliography section.

Reporting of Work Subject to Compliance Regulations

Compliance with federal regulations governing the use of human subjects, animal care, radiation, legend drugs, recombinant DNA, or the handling of hazardous materials in research is monitored by a number of federal agencies. Because of these regulations, research compliance is another area of importance to graduate students and to the conduct of their research. The Office of Graduate Studies requires every student to verify that he or she has complied with the appropriate approval procedures prior to initiation of the thesis/dissertation related research, if approval is relevant to the research. Additionally, a statement of knowledge of compliance is included on the Admission to Candidacy form. By their signatures, the committee acknowledges that proper compliance has been obtained.

The Coordinator of Compliances in the Office of Research, http://research.utk.edu/ora/sections/compliances/, will provide counsel for questions regarding the required approvals for research projects. If approvals are needed, detailed information, materials and guidance in the completion of the appropriate forms are all available from the Coordinator of Compliances.

General Policies

Refer to the latest edition of the *Graduate Catalog* for policies concerning registration for thesis/dissertation hours, restricted, classified or proprietary research, and other requirements for completion of the graduate program.

The goal of the Office of Graduate Studies, as well as the student's thesis/dissertation committee, is to ensure that a document has been produced that will reflect well on, and properly represent, the student, the student's committee, the department, and the University.

Forms Required for Graduation

Proper and timely preparation and submission of the forms required for graduation are an integral part of the thesis/dissertation process. The specific deadline dates for submission are published each semester by the Office of Graduate Student Services. Two publications, "Graduate Student Deadline Dates" and "The Steps–Forms and Tasks Required for Graduation," contain detailed information about forms, deadlines and commencement. Copies of these publications and the forms required for graduation can be accessed via the Internet at http://web.utk.edu/~gsinfo.

Doctoral Forms

Doctoral students must submit three additional forms for graduation. A ProQuest Doctoral Dissertation Agreement Form, Survey of Earned Doctorates, an Abstract Form, and note of explanation will be provided by the Thesis/Dissertation Consultant during the final submission process. The Doctoral Dissertation Agreement Form allows ProQuest to microfilm, and make available via an electronic database, the dissertation. This constitutes publication and makes the dissertation available to the public. The Abstract Form, along with a copy of the abstract, will be sent to *Dissertation Abstracts International*. The Thesis/Dissertation Consultant will provide these forms to doctoral students during the submission process.

Definition of Terms

Typeface or Font

These terms apply to all the features available within a family of print characters and includes bold, italics, and the various sizes of any named font (Arial, Times New Roman, Courier, etc.)

Text

In the discussion of formatting, text is used as a generic term to designate the main body of the thesis/dissertation and to distinguish this element from preliminary pages, references, tables, figures, and appendices.

Preliminary Pages

These pages serve as a guide to the contents and nature of the manuscript. The preliminary pages are comprised of, but not limited to, the approval sheet, title page, abstract, table of contents, list of tables, and list of figures.

Table

A table consists of numbers, words, or both and presents information that is separated into columns with distinct column headings. Tabular information allows the student to convey precise information to a reader in a structured format.

Figure and Plate

Any diagram, illustration, graph, chart, map, photograph, or material that does not fit into the restricted format for a table is a figure. Figures generally show relationships or illustrate information, rather than present precise data. Plates consist of oversized material that does not fit within the conventional standards of a document, such as a CD-Rom or a fold-out map.

Equations

Equations are considered to be part of the text and therefore should not be set apart from the text within a box or in any other way.

Appendix

An appendix can be used for supplementary material that is related to the text. In some cases, tables and/or figures are placed in an appendix to avoid interrupting the text.

CHAPTER II THESIS/DISSERTATION ELEMENTS AND STYLE

The appendix contains examples of many of the elements discussed in this chapter. These examples are representative of the many acceptable formatting techniques for particular parts of the thesis/dissertation. Please note that the style, typeface, and font size used may vary from example to example. Students should use a uniform and consistent style, typeface, and font size throughout the document. Table 1 (on page 10) shows the sequence and numbering scheme for the various thesis/dissertation parts.

Preliminary Pages

Approval Sheet

The approval sheets certify to the Office of Graduate Studies that the committee members have examined the final copies of the thesis/dissertation for form and content and find the document acceptable for final submission (*UT Graduate Catalog*, 2002–2003, pgs. 21, 23).

Each of the final paper or electronic copies of the thesis/dissertation submitted to the Office of Graduate Studies must be accompanied by an approval sheet using the exact wording shown in figures A-1 and A-2¹. The approval sheet must be in the same typeface as the remainder of the thesis/dissertation, and the student's name used on the sheet must appear as he/she is registered at The University of Tennessee. Each sheet must have original committee signatures, not copies of the signatures. Black ink is recommended but not required for the original signatures. The number of signature lines should equal the number of committee members. The major and degree to be awarded must be exactly the same as the official major and degree to which the student was admitted by the Office of Graduate Studies. Since official majors can change, it would be wise to call the Graduate Records Office and ask to check the official major under which conferral of degree will take place. The approval sheets are not numbered, nor are they counted in the numbering sequence of the thesis/dissertation.

If submitting paper copies of a thesis/dissertation, this sheet must be on the same brand and weight of cotton paper as the remainder of the thesis/dissertation. If submitting electronic copies, this sheet can be on any brand of acid-free paper. Please note in figures A-1 and A-2 that the wording is slightly different depending on submission type.

¹ All figures are located in the Appendix.

Title Page

This page is assigned a roman numeral "i," although the number does not appear on the page (see table 1 for details). The title of the document should be placed at the top of the page, the degree statement in the middle, and student name and month/year of graduation at bottom. The student's name must appear as he/she is registered at The University of Tennessee (see figure A-3).

Copyright Page

Students may wish to copyright their thesis/dissertation. If so, a copyright page can be used in the document as page ii. The thesis/dissertation can be formally copyrighted, either through ProQuest (doctoral students only) or with a form downloaded from the U.S. Government's official copyright website: http://lcweb.loc.gov/copyright/ (master's or doctoral students). If using this page, the wording should appear as shown below. This statement should be typed at the top or center of page.

Copyright © 2003 (insert appropriate year) by John Doe (student name) All rights reserved.

Dedication

If the student wishes to dedicate the thesis/dissertation, the dedication statement is included on this page. If appropriate, the student may wish to include a picture, short quote, etc. on this page (see figure A-4).

Acknowledgments

This page is used to thank those who have helped in the process of obtaining the graduate degree. Permission to quote copyrighted material is listed here, as well as acknowledgment for grants and special funding (see figure A-5).

Abstract

Each thesis/dissertation submitted to the Office of Graduate Studies must include an abstract (see figure A-6). Although the content of the abstract is determined by the student and committee, the following information is appropriate: [1] a short statement concerning the area of investigation, [2] a brief discussion of methods and procedures used in gathering the data, [3] a condensed summary of the findings, and/or [4] conclusions reached in the study. There is no word limit on the abstract, but doctoral students must provide one separate copy of the abstract to the Office of Graduate Studies that cannot exceed 350 words in length. This separate copy will be sent to *Dissertation*

 Table 1. Arrangement of Thesis/Dissertation Parts.

Thesis/Dissertation Parts	Page Assignment	
Approval sheet	No page number assigned (Not numbered or counted in page numbering sequence)	
Title page	Small roman numeral, beginning with 'i' (Assigned, not typed)	
*Copyright page		
*Dedication		
*Acknowledgments		
Abstract		
*Preface	Small roman numerals, beginning with 'ii'	
Table of Contents	(Typed on page)	
List of Tables (if 5 or more are included)		
List of Figures (if 5 or more are included)		
List of Plates (if plates are used)		
*List of Symbols and/or Abbreviations		
Body of thesis/text		
Separation sheet for Bibliography/List of References		
Bibliography/List of References	Arabic numerals, beginning with '1' (Typed on page)	
Separation sheet for Appendix (if used)		
*Appendix		
Vita		

^{*}Note: Parts preceded by an asterisk are optional; all others are required.

Abstracts International.

Preface

A personal statement about the purpose and scope of the thesis/dissertation would be included in the preface. The tone of a preface, however, must be academic and appropriate to scholarly work (see page iv for example).

Table of Contents

The table of contents may vary in style and amount of information included. Chapter or section titles, the bibliography/list of references, the appendix, if used, and the vita should be included. Page numbers shown in the table of contents for the bibliography and appendix must be the number assigned to the separation sheet preceding each section. Although it is not necessary to include all levels of headings, any inclusion must be consistent. If a particular level is included at any point, all headings of that level must be included. No preliminary pages with roman numerals are included in the table of contents. The table of contents entries begin with page 1 (see pages v-vi for example; remember that student's table of contents will end with a 'vita').

List of Tables/List of Figures/List of Plates

If there are five or more tables or figures in the thesis/dissertation, a list of tables and/or a list of figures must be included. Because plates are not part of the bound copy, a list of plates must always be included. There must be a separate list for tables, figures, and plates. Any tables or figures, designated as such, appearing in the appendix must also be included in the appropriate list. Each title must be unique, and all titles must be entered in the lists worded exactly as they appear on the table, figure or plate. This includes information up to the first terminal punctuation. Additional explanatory information need not be included on this list (see pages vii and viii for examples).

Nomenclature/List of Abbreviations/List of Symbols

The title of this material should reflect its content and may be included to define specialized terms, symbols or abbreviations. This information may also be placed in the appendix (see figure A-7).

Text

Major Divisions

The thesis/dissertation must be divided into a logical scheme that is followed consistently throughout the document. This logical scheme begins with a major division, such as a chapter or section (see page 1 for example). Chapters are the most common division, but sections and parts are also permissible. (For a discussion of division in parts, see Chapter IV, Special Problems and Considerations.) Chapter or section numbers and titles are primary divisions of the entire thesis/dissertation and are not part of the subdivision scheme.

Each major division (part or chapter) must have a title, be numbered consecutively throughout the document, and begin on a new page. A major division entitled *Introduction* may precede the first numbered chapter or section. If this method is used, the student must end the document with another unnumbered major division entitled *Conclusion*.

Subdivisions/Headings

Any logical system of subdivision within chapters or sections is permissible, but the scheme used must be consistent throughout the document. The appearance of the heading must vary in style for each level of heading unless a numbering sequence is used to indicate level (see next page for example of formatting styles for three levels of headings). The headings within a chapter or section do not begin on a new page unless the preceding page is filled with text. If there is not room for the complete heading and at least two lines of text at the bottom of a page, the new heading should begin on the next page. First and second level headings may be preceded by extra space to indicate to the reader a major shift in material.

References Within Text

Referencing usually consists of information in parentheses or square brackets within the text. Two common methods of referencing are: [1] to use the author's name and date of publication, as in (Smith, 2001), or [2] to assign numbers to the bibliographic entries and insert the corresponding numbers for the authors as they are cited in the text, as in Smith (5). The purpose of internal referencing is to guide the reader to the appropriate entry in the list of references/bibliography, where complete information is available. "Notes documenting the text and corresponding to reference numbers in the text are called footnotes when they are printed at the bottom of the page..." (*Chicago Manual of Style*, 1993, pg. 494). Footnotes or references collected at the end of each chapter or section (endnotes) are not permissible.

The form, style and content of references or footnotes should be determined by what is generally accepted in the student's field of study, using a professional journal or style manual. Students using both references and footnotes in the text must use a different format or style to differentiate the two. Also, the footnote number and beginning of footnote must appear on same page.²

Tables, Figures and Plates

Tables

Tables are usually quantitative in nature and "should be organized so that entries that are to be compared are next to one another" (*APA*, 2001, pg. 148), hence the need for the tabular format of a table.

<u>Typeface</u>. Since tables are typeset by the student rather than photographed, copied, or imported from an external source, the base typeface used for the thesis/dissertation must be used for table number, title, and data. The size of the type for table content should be the same as the rest of the document, but may differ slightly if necessary (e.g., may drop a font size or two).

<u>Required format.</u> Since tables consist of tabulated material or columns, the use of lines in tables helps the reader distinguish the various parts of the table. The table must include the following three horizontal lines:

- 1. The table opening line, which appears after the table title and before the columnar headings.
- 2. The columnar heading closing line, which closes off the headings from the main body of the table.
- 3. The table closing lines, signaling the end of the table. Any information appearing below the closing line is footnote material.

Different table styles, such as a full grid, (e.g., vertical lines and additional horizontal lines) are acceptable but not required (see figure A-8).

Tables must have at least two columns which house headings at the beginning of the table. These headings should describe the data to be presented in the table (*Chicago Manual of Style*, 1993, pg. 413). The headings appearing between the table opening line and the column heading closing line must apply to the entire column down to the table closing line. This is especially important when tables continue onto additional pages. It is never acceptable to change columnar headings on continued pages. One method of avoiding this problem is to add subheadings below the columnar heading closing line.

² Example noted above.

<u>Continued tables.</u> Tables may be continued on as many pages as necessary, provided the columnar headings remain the same and are repeated on each continued page. The first page contains the table number and title, and subsequent pages contain the remainder of the table and the designation: Table #. Continued.

<u>Table footnotes.</u> Footnotes to tables consist of four different categories: [1] full source citation, [2] general notes, [3] notes to specific parts of the table indicated by superscripts, and [4] notes on level of probability. Students should use any/all that are applicable to a particular table.

Figures

Illustrative visual material, such as a photograph, map, line drawing, graph, or chart, should be called a figure (*MLA Handbook*, 1999, pg. 108). See figure A-9 for an example of a figure.

<u>Typeface.</u> Since figures are considered illustrations or diagrams and may be imported from an external source, any text that is part of the figure can be in any typeface, provided it is neat and legible. The figure number and title must be in the same base typeface as the rest of the thesis/dissertation because this material is considered to be part of the typeset body of the document.

<u>Legends.</u> Explanatory material for figures may be placed within the figure, either above or below the title or continued after the period following the title. If a figure has a long legend which must be placed on a separate sheet because of the size of the figure, this page must be placed immediately before the figure (see figure A-10). The page number assigned to the legend page is considered to be the first page of the figure. The figure title would appear on the legend page, together with the legend information. Separate legend pages are used only if needed.

<u>Continued figures.</u> A figure containing several related parts too large to be included on a single page may be continued onto other pages. The first page contains the figure number and complete title, and subsequent pages contain the remainder of the figure and the designation: Figure #. Continued (see titles for figures A-7, A-10).

<u>Figure footnotes.</u> Footnotes are placed below the figure title but are not separated by a dividing line. If the figure or data within the figure are taken from another source, the source citation must be included.

Plates

Material such as oversized maps or drawings, videotapes, diskettes, CD-ROMs, or other materials that cannot be bound must be labeled as plates, not tables/figures. If it

is necessary to include plates, these materials should be listed in a list of plates and indicated as being "In Pocket." A label stating the plate number and title and the student's name and date of graduation must be affixed to each plate. A pocket for the plate will be attached to the inside back cover of the hardbound copies at the bindery.

Titles

Each table, figure, or plate must have a unique title descriptive of its contents; no two titles can be exactly the same. The number and title must appear above each table and below each figure. Figures/tables containing parts must be given a general title, after which the figure/table may be broken down into separate parts, as in a), b), etc. For multiple part figures/tables, the title may be composite, with no references to individual parts (see figure A-10), or integrated, with titles for each part as part of the general title (see figure A-8). The style of the titles must be consistent for all figures/tables.

Numbering

Since tables, figures and plates are separate entities, they must be numbered independently and can be numbered in one of several ways. Three of the most common numbering schemes are: [1] to number consecutively throughout the thesis/dissertation, including the appendix, using either roman or arabic numerals (e.g., 1, 2, 3, etc.), [2] to number within chapters, with appendix tables or figures carrying a prefix of "A" for appendix or a prefix designating the specific appendix (e.g., 1.1, 1.2, 2.1, 2.2, A.1, A.2, etc.), [3] to establish a consecutive numbering for the body of the manuscript and a different one for the appendix (e.g., 1, 2, 3 for text and A.1, A.2, etc. for appendix). The style of numbering must be consistent for all figures/tables.

Placement

Tables, figures and plates must be referenced in text by number, not by expressions, such as "in the following table/figure" (*A Manual for Writers of Term Papers, Theses, and Dissertations*, 1996, pg. 92). When more than one table/figure is referenced on a page of text, each follows in the order mentioned until all have been placed, then text begins again. In degree of importance, tables/figures are secondary to the text. This means that all text pages must be filled with text; in no case should they be left significantly free of text because of the mention of a table/figure.

Tables/figures can be placed in the thesis/dissertation in one of three ways: [1] in an appendix, [2] on a separate page immediately following the text page where first referenced (e.g., table 1.1 is referenced on page 7: page 7 is full page of text, table 1.1 is placed by itself on page 8, text begins again on page 9), [3] if less than one-half page in size, incorporated within the text.

<u>Placement within document.</u> It is recommended that tables/figures be assigned pages separate from the text to avoid problems in shifting during last-minute revisions (see page 10 for example). However, if the student wishes to incorporate tables/figures within the text, the following criteria must be met:

- table/figure must be separated from the text by extra space (approximately ½ inch)
- table/figure cannot be continued onto a following page
- table/figure must be placed at top or bottom of page, never center/near center of page.

There should always be a balance of no less than one-half page of text and no more than one-half page of table/figure below or above the text (see figure A-11). If multiple tables/figures are mentioned together on a page, they may be placed on pages together, provided there is approximately ½ inch between each table/figure.

<u>Placement in an appendix.</u> When all tables/figures are placed in an appendix, this fact is stated in a note in the body of the text and is not repeated thereafter. This note should be placed on the page of text that references the first table or figure in the document (see page 8 for example). The note could be presented as part of a sentence, parenthetical information, or a footnote. When only some of the tables/figures are in an appendix, their location must be clearly indicated as referenced in the text (e.g., Table 1, Appendix A), unless the numbering scheme makes the location obvious (e.g., Table A-1).

<u>Horizontal Placement.</u> To accommodate large tables/figures, it is sometimes necessary to orient them horizontally on the page (see figure A-12). The margin at the binding edge (top of horizontal page) must still be 1 ½ inches, and all other margins at least 1 inch. The placement of the page number must be consistent with the rest of the thesis/dissertation. The table/figure and its caption must be placed so that it can be read when the document is turned 90 degrees clockwise.

<u>Foldout pages.</u> Large tables/figures should be reduced to fit an $8\frac{1}{2} \times 11$ inch page, if possible. If not, material on approved acid-free paper larger than $8\frac{1}{2} \times 11$ inches may be included in the thesis, provided the page used is 11 inches vertically and is folded properly. The fold on the right side must be at least 1 inch from the edge of the paper. The second fold, on the left side, if needed, must be at least $1\frac{1}{2}$ inches from the binding edge of the paper. The finished page, folded, should measure $8\frac{1}{2} \times 11$ inches. The paper used must be a cotton-content, acid-free paper. The placement of the page number must be consistent with the rest of the thesis/dissertation. See the Thesis/Dissertation Consultant for information on pagination.

Bibliography/References

A thesis/dissertation must include a list of materials used in the preparation of the document. This may consist of only references cited in the text (e.g., list of references)

or may also include works consulted, but not cited, in text (e.g., bibliography). The list is preceded by a separation sheet with the title, List of References, Bibliography, Works Consulted, or Works Cited at top or center of page (see page 28 for example). This sheet is assigned a page number. The purpose of listing the citations is threefold:

- 1. To serve as an acknowledgment of sources
- 2. To give readers sufficient information to locate the material
- 3. In the case of personal interviews or correspondence, to save the reader the trouble of attempting to locate material that is not available.

The format used for the citations should be that used in student's field of study. Citations cannot be collected at the end of chapters or sections, only at the end of the document. The separation sheet and citations should not be sequentially numbered as a chapter or section (Chapter 1, Chapter 2, etc.) because they are not part of the body of text. This refers to chapter/section number only, not page numbers.

Appendix

The appendix "...is a useful device to make available material that is relevant to the text but not suitable for inclusion in it" (A Manual for Writers of Term Papers, Theses, and Dissertations, 1996, pg. 12). An appendix, if included, is preceded by a separation sheet with the title, Appendix, Appendixes, or Appendices, at top or center of page (see page 30 for example). This sheet is assigned a page number. In some cases, all tables/figures are moved to the appendix to avoid interrupting the text. Appendix material cannot be collected at the end of chapters or sections, only at the end of the document. The separation sheet and appendix should not be sequentially numbered as a chapter or section (Chapter 1, Chapter 2, etc.) because they are not part of the body of text. This refers to chapter/section number only, not page numbers.

Appendix divisions. If the student wishes to subdivide the appendix, the subsections must follow a logical division. Each separate appendix can have either an additional separation sheet with the number (1, 2, 3 or A, B, C) and title at the top or center of page with material beginning on next page, or each separate appendix number and title can begin at the top of the page where material begins. In either case, the main separation sheet, Appendixes or Appendices, is still required.

<u>Appendix material as a plate.</u> If appendix material is included as a plate, a page should be included stating how material is accessible and how it should be used (see figure A-13).

Vita

The vita is written in narrative form, not resume form, and contains appropriate academic and professional information about the author/student (see figure A-14). Since copies of the manuscript will be available to the public, personal information should not

be included. The vita is the last numbered page of the thesis/dissertation and is not preceded by a separation sheet.

CHAPTER III FORMATTING AND TECHNICAL POINTERS

Typeface and Quality

Typeface or Font

Typeface affects the physical appearance of a manuscript more than any other single element. Word processing software packages provide the opportunity to use different typefaces, type sizes, and font attributes, such as bold or italics. The size of type is determined by point size. Text is most readable in 10, 11 or 12 point, so these sizes are highly recommended for use in the thesis/dissertation. Other sizes may be used for emphasis or as technique. Students should use specific type sizes and font attributes to establish styles or conventions that will be followed consistently throughout the document. If the decision is made to begin each chapter with a number and title centered, using 14 point, italic Times New Roman font, that convention should be followed for all chapter numbers and titles. The same is true for all other parts of the document.

The typeface selected for text will be the base style or the starting point for all type selection and will establish the framework for the entire document. All the following items must be in the family of type selected as the base style:

- all preliminary pages, including approval sheets
- all text
- all tables, even those from other sources provided they are called tables
- figure numbers and titles (the text within figure may be different typeface)
- all page numbers, including appendix page numbers

Type Quality

Acceptable type quality for the final master copy is determined by the following two factors: clean, crisp type with no distracting marks and dark copy indicating sufficient toner for readability. Any font may be used as long as it meets the criteria listed above.

Spacing

Spacing has both aesthetic and utilitarian effects on the appearance of the document. Vertical spacing (or leading) determines the number of lines of text that will fit on a page and can make the thesis/dissertation appear either cluttered or uncluttered, depending on the amount of space left between lines. Horizontal spacing (or kerning) affects the spacing between letters of text, and, like leading, makes the spacing of

proportional fonts appear disjointed or jointed.

Most technical decisions about both vertical and horizontal spacing are determined by the word processing package. When a typeface and size are selected, the default values for kerning are automatically set. Most word processing packages then allow the user to set the spacing for vertical measurement, using the predetermined line height as a basis. Single spacing leaves a small space between two lines of text, one and a half spacing leaves a half line of text between two lines, and double spacing leaves the equivalent of one line of text between the two lines.

The entire thesis/dissertation can be single, one and a half, or double spaced. The convention chosen should be followed throughout the body of the document. For example, if the student chooses to make the document one and a half spaced and make all quotes within the document single spaced, then this convention should be used for all text and quotes.

If paragraph indentions are used, they should be uniform throughout the document

Other Formatting Considerations

Margin Settings and Justification

The inside margin must be no less than 1 ½ inches and the outside, top, and bottom margins no less than 1 inch. All material included in the document, including text, tables, figures, page numbers, etc., must fit within these margins. These margins define the minimum white space to be maintained on all sides of the page. For software-specific margin settings, please see the Thesis/Dissertation website: http://web.utk.edu/~thesis.

"To make a line of type, regardless of the words in it, exactly the same length as its fellows [all other lines] is to justify the line" (*Chicago Manual of Style*, 1993, pg. 772). Either full-justified or left-justified margins are permissible. The use of justified margins must be consistent throughout the document. Dividing the text into columns (journal/newspaper style) is not permissible.

Pagination

Table 1 shows the sequencing and pagination of the various parts of the thesis/dissertation. Small roman numerals are used to number pages preceding the text. Although the preliminary paging begins with the title page, no number appears on this page. Therefore, the page following the title page should begin with the number ii. Beginning with the first page of the text, all pages should be numbered consecutively

throughout the document, including the references, appendix, and vita, with arabic numerals beginning with number 1. Pagination using letter suffixes (e.g., 10a, 10b) is not allowed. The number may be positioned at the top or bottom outside edge of page or at bottom center of page and must be consistently placed in same area throughout the document. For paper copies, the page number orientation must always be portrait orientation, even on pages that contain material that is landscape orientation. For electronic copy, the page numbers can be oriented in landscape on pages that contain landscape material. Page numbers should appear on every page in the document except the approval sheet (not numbered or counted) and the title page (not numbered but counted). Running headers or footers are permissible if the following criteria are met:

- can only be used if page numbers are printed on outside edge of page
- can only include title of document or parts/chapters within document
- must be placed in front of, and on same line as, page number

Paper and Duplication

If submitting paper copies, the two final copies of the thesis/dissertation must be produced using a laser printer or photocopier. Inkjet, dot matrix, or bubblejet printers cannot be used to produce the final copies of the document. The final paper copies must be printed on 100% cotton, 24 pound weight, white paper. Any brand can be used, but the same brand of paper must be used throughout both copies, including the approval sheets. If submitting an electronic copy, an approval sheet must be produced using any brand of white acid free paper.

Paper copies must be double-sided (image on both sides of paper), not single-sided. Electronic copy should not be formatted for double-sided output. There are two possible ways to format the double-sided paper copies. Both options follow the general rule that odd pages are front/right hand sides of pages and even pages are back/left hand sides of pages.

Option 1: All preliminary pages (except approval sheet) should be double-sided, and all pages from 1 (on front/right hand side of page) to end of document should be double-sided. Page ii will be printed on the back side of the title page, and then iii and iv will be double-sided, etc. The one possible exception to the double side rule is if the preliminary pages end on an odd page. If this is the case, the back side of the odd page should be left blank, so that page 1 can begin on the front/right hand of a page. If the preliminary pages end on an even number, this is not a problem. In essence, the title page (i) to end of preliminary pages are double-sided, with title page beginning on front of page. Pages 1 to end of document are double-sided, with page 1 beginning on front of page.

• Option 2: Specific sections of the document fall on the front/right hand sides of the page, all major divisions, dedication, abstract, all chapters, references, appendix, and vita begin on the front side of a page. To achieve this, insert blank pages in appropriate spots, and suppress the page numbers on these pages. In essence, the pages would be counted but not numbered. The first page of references and appendix can be, but do not have to be, copied on the back side of separation sheets.

For students using foldout pages, see the Thesis/Dissertation Consultant for information on pagination.

Consistency in Format

The element that contributes most to the attractiveness and readability of the thesis/dissertation is consistency. Consistency in formatting means that the student establishes a series of conventions or protocols regarding spacing, heading sequencing, and other aspects of appearance to visually guide the reader through the document, thus enabling the reader to concentrate on the content. Consistency in thesis/dissertation production is especially critical, since it determines in part the committee reaction to content and, ultimately, acceptance of the document by the Office of Graduate Studies.

CHAPTER IV SPECIAL PROBLEMS AND CONSIDERATIONS

The guidelines given in the previous chapters are sufficient for most theses/dissertations. However, there are several circumstances that require additional guidance. This chapter addresses a few of the more specific questions that may arise in thesis/dissertation preparation, such as the use of papers that have been or will be submitted to journals and requirements pertaining to creative writing and foreign languages.

The Use of Journal Articles in Theses and Dissertations

A thesis/dissertation may include articles submitted or about to be submitted to professional journals. However, certain guidelines must be met before these can be included in the final document. The student must add a brief explanatory statement at the beginning of each article, stating how the article was revised and/or detailing the student's involvement in the article (see figure A-15). If the article has been published, or will be published during the final submission process, the source should be cited as part of this statement.

Additionally, the individual papers must be integrated into a unified presentation, which may be accomplished through an introductory chapter which might contain, among other things, a detailed literature review that is not present in most journal articles. Also, one or more connecting chapters might be used to expand upon the methodology or the theoretical implications of the findings presented in the individual articles. The guidelines given in the previous chapters, including a uniform style of headings, reference citations, and bibliographical format, must be used, even though the individual papers may have been prepared for submission to journals with different formatting requirements. Each paper may be listed as an individual chapter within the document or may be treated as a part and follow the multi-part format discussed in the next section. If treated as parts, neither the brief explanatory statement nor the source citation may appear on the required part separation sheet.

Multi-Part Theses and Dissertations

With committee approval, the primary division of a thesis/dissertation may consist of parts rather than sections or chapters. The use of parts is an effective method of organization when research has been performed in two or more areas not practical to be combined into a single presentation or to assist in maintaining consistent format for journal articles. Each part may be treated as a separate unit, with its own chapters, figures/tables, bibliography and appendix (if needed), or the bibliography and appendix

may be combined at the end of the document. In all cases, the document must include an Introduction which provides an overview and summary of the project, and a single table of contents, list of tables and list of figures. Consecutive pagination should be used throughout the document, including numbering of the required separation sheets listing the part number and title. These separation sheets must be placed immediately in front of the first page of text for each part.

Creative Writing Theses

All theses, including those in creative writing, are expected to adhere to the basic guidelines given in the previous chapters and must be blended into a unified presentation. The Office of Graduate Studies requires the following elements for acceptance of a thesis in creative writing:

- Approval sheet
- Title page
- Abstract
- Table of contents
- Introduction, which sets the academic tone for the body of the thesis and provides a rationale for the acceptance of the creative work as a thesis.
- Vita

Theses and Dissertations Prepared in a Foreign Language

A thesis/dissertation should be written in English. Under exceptional circumstances, another language may be used if prior approval is obtained from the Office of Graduate Studies. A request to write in a language other than English should be submitted to the Dean of Graduate Studies by the student's thesis committee, with the endorsement of the Department Head and the Dean of the College, prior to Admission to Candidacy for the degree sought. The request should include a proposal and justification for the exception. In all cases, one abstract must be written in English (*UT Graduate Catalog*, 2002-2003, pg. 20).

CHAPTER V CONCLUDING INSTRUCTIONS

Preliminary and Final Review

Preliminary and final reviews are the last examinations of the document for details *prior* to official submission to the Office of Graduate Studies. The preliminary review is mandatory. During the process of preparation, the Thesis/Dissertation Consultant is available for consultation and examination of theses/dissertations by phone, office visit, mail or e-mail. During the preliminary review, necessary formatting revisions will be addressed, identified and resolved. Once the Final Examination/Defense of Thesis/ Dissertation is passed, the Consultant will examine the document in detail, as if it were the final copy. This final review will be done with a paper copy if submitting paper copies or with an Adobe® Acrobat® pdf version of the document if submitting electronic copy. Any errors found at that point can be corrected prior to final submission.

Final Submission Options

Great care should be taken when considering which submission option is the best. Students should consult with the committee regarding submission options during the preparation of the thesis/dissertation.

Paper Submission

Two loose-leaf, double-sided copies of the thesis/dissertation printed on 100% cotton, 24 pound paper in an $8\frac{1}{2}$ x11 inch letterhead box, accompanied by two approval sheets with original signatures on the same brand of 100% cotton, 24 pound paper must be submitted and accepted by the Office of Graduate Studies by the published deadline date. Doctoral students are also required to submit the packet of doctoral forms (see page 4 for details) by the published deadline date.

Paper copies approved for final submission will be sent to the University Libraries bindery one month after conferral of degree. One of the hardbound copies will be placed on the shelf in Hodges Library for circulation, and the second hardbound copy will be placed in Library Archives. The circulation copy will appear in the library catalog and on the shelf approximately one year after conferral of the graduate degree.

Electronic Submission

One Adobe® Acrobat® pdf file of the thesis/dissertation (including the ETD approval sheet), original file(s) used to create the document (word processing, spreadsheet, multimedia software package files), electronic Digital Library Information Form, and one paper approval sheet with original signatures on any brand of acid-free paper must be submitted and accepted by the Office of Graduate Studies by the published deadline date. Electronic submittals should not be formatted for double-sided output. Doctoral students are also required to submit the packet of doctoral forms (see page 4 for details) by the published deadline date. For further information about electronic submission, please visit the Electronic Thesis and Dissertation (ETD) website at http://etd.utk.edu.

Electronic copies approved for final submission will be cataloged and placed on the ETD website approximately four weeks after conferral of the degree. At this time, the electronic copies will be publicly available.

Submission Dates

The specific deadline dates for submission are published each semester by the Office of Graduate Student Services in the publication "Graduate Student Deadline Dates." Copies of this publication can be accessed via the Internet at http://web.utk.edu/~gsinfo. Each semester there are three dates for submission of final copies of all theses/dissertations. The first two deadlines are approximately two weeks before the Main Commencement Ceremony and must be met by all students expecting to graduate that semester. One date is for electronic submission, and the other date is for paper submission. The remaining, third date (for paper and electronic submission) is for the second deadline. Students meeting the second deadline will not graduate until the next semester; however, registration for the semester in which the degree is conferred is not required, since students meeting the second deadline are considered to have completed the degree requirements within the semester in which they were registered. Students must be registered for the appropriate amount of thesis/dissertation hours during the term in which the thesis/dissertation is accepted by the Office of Graduate Studies.

Additional Copies and Binding

All other copies of the thesis/dissertation, including any required by the department and/or committee, are produced and bound through arrangements made personally by the student. The major professor or department secretary can help determine who expects to receive copies and how copies should be presented. The University of Tennessee Book and Supply Store provides a low-cost binding service.

Commencement Information

Commencement ceremonies are held twice a year, at the end of the fall and spring semesters. There are no commencement ceremonies held during the summer semester. At the end of the fall and spring semesters, there is a Main Commencement Ceremony and a Doctoral Hooding Ceremony. The Doctoral Hooding Ceremony is held the evening before the Main Commencement Ceremony. Tickets are not required for guests attending the commencement ceremonies, and there is no limit as to the number of guests who may attend. The University of Tennessee Book and Supply Store provides a service for the purchase of cap, gown and tassel and rental of hoods for those graduates attending the commencement ceremonies.

Commencement ceremonies at The University of Tennessee are conducted in the best ceremonial tradition: meaningful, colorful, and important. Taken seriously, they are a fitting culmination of the energy and effort made by the student to obtain a graduate degree. Whatever the degree to be conferred, the ceremonies mark the ending of the graduate career at The University of Tennessee and the beginning of a professional or further graduate career.

LIST OF REFERENCES

LIST OF REFERENCES

- *The Chicago Manual of Style.* Fourteenth Edition. Chicago: The University of Chicago, 1993.
- Gibaldi, Joseph. *MLA Handbook for Writers of Research Papers*. Fifth Edition. New York: The Modern Language Association of America, 1999.
- Publication Manual of the American Psychological Association. Fifth Edition. Washington, D.C.: American Psychological Association, 2001.
- Turabian, Kate L. *A Manual for Writers of Term Papers, Theses, and Dissertations*. Sixth Edition. Revised by John Grossman and Alice Bennett. Chicago: The University of Chicago Press, 1996.
- *The University of Tennessee Graduate Catalog/2002-2003.* Knoxville: The University of Tennessee, 2002.

APPENDIX

To the Graduate Council:	
I am submitting herewith a dissertation written by Shannon Stewart Eaker entitled "Analysis of Events Governing the Meiotic Division in Mouse Spermatocytes." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Biochemistry and Cellular and Molecular Biology.	
	Mary Ann Handel, Major Professor
We have read this dissertation and recommend its acceptance:	
	Acceptance for the Council:
	Vice Chancellor and Dean of Gradua Studies

Figure A-1. Sample Approval Sheet Format for Electronic Submission.

Source: Shannon Eaker, "Analysis of Events Governing the Meiotic Division in Mouse Spermatocytes." Doctoral Dissertation in Biochemistry, Cellular and Molecular Biology, The University of Tennessee, August 2001.

Applications for the Installation of Integration from final paper copy of this thesis for form	grated Systems." I have examined the
I am submitting herewith a thesis written by David Paulus entitled "Industrial Applications for the Installation of Integrated Systems." I have examined the final paper copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Industrial Engineering.	
	Tyler Kress, Major Professor
We have read this thesis and recommend its acceptance:	
	- -
	Acceptance for the Council:
	Vice Chancellor and Dean of

Figure A-2. Sample Approval Sheet Format for Paper Submission.

Source: David Paulus, "Industrial Applications for the Installation of Integrated Systems." Master's Thesis in Industrial Engineering, The University of Tennessee, August 2001.



Figure A-3. Sample Title Page.

Source: Toby Lee Fey, "Technology and Tradition: Jewish Bioethics in the Age of Genetics." Doctoral Dissertation in Philosophy, The University of Tennessee, August 2001.

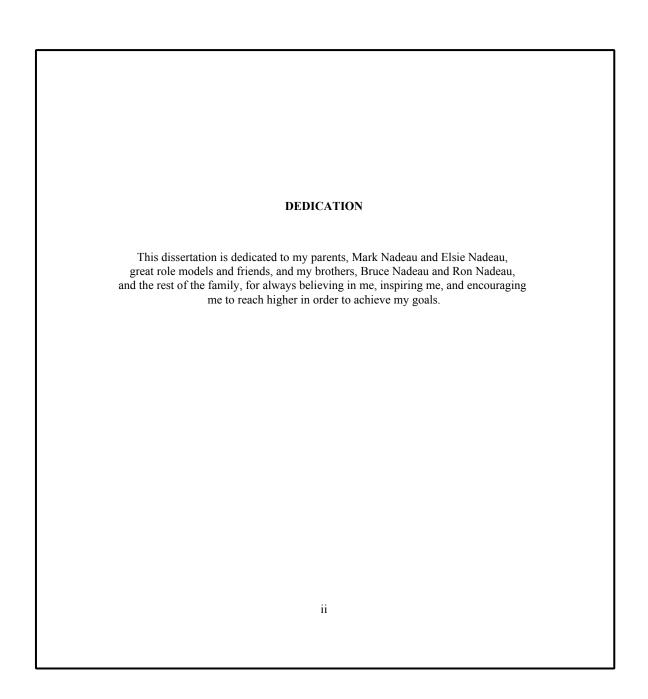


Figure A-4. Sample Dedication Page.

Source: Jenifer Nadeau, "Pathogenesis of Acid Injury in the Non-Glandular Region of the Equine Stomach: Implications in Gastric Ulcer Disease." Doctoral Dissertation in Animal Science, The University of Tennessee, August 2001.



I wish to thank all those who helped me complete my Master of Science degree in Electrical Engineering. I would like to thank Dr. Crilly for his guidance and his effort in making me familiar with the concept of Wavelet Transform. I would like to thank Dr.Bouldin for introducing me to various CAD tools and for his ideas and valuable guidance through the research process. I would also like to thank Dr. Pace for serving on my committee.

Lastly, I would like to thank my family and friends, whose suggestions and encouragement made this work possible.

ίV

Figure A-5. Sample Acknowledgments Page.

Source: (Adapted from) Sowmyan Rajagopalan, "Implementation of Wavelet Transform and Area, Power and Delay Design Space Exploration." Master's Thesis in Electrical Engineering, The University of Tennessee, August 2001.

Abstract

The purpose of this study was to examine the correlation between schools' level of involvement in CHARACTER COUNTS! activities and the desired behaviors of elementary school students in Sullivan County, Tennessee. General perceptions of educators and administrators about the CHARACTER COUNTS! program were collected from 328 respondents from 27 public elementary schools, and a profile of school involvement in CHARACTER COUNTS! activities was developed for schools with the best student behavior.

While it cannot be stated that CHARACTER COUNTS! caused changes in behavior, this study revealed a substantial positive correlation (P=.64) between school involvement in CHARACTER COUNTS! activities and desired student behaviors perceived by elementary school educators and administrators.

Findings also revealed that 95.2% of respondents agreed (38.3%) or strongly agreed (56.9%) that character education is an important part of their work, and more than 80% of respondents believe CHARACTER COUNTS! is an effective program. Respondents also agreed (35.3%) or strongly agreed (4.4%) with the statement, "I have fewer discipline problems because of CHARACTER COUNTS!."

Recommendations for primary strategies for school efforts in developing a CHARACTER COUNTS! program are provided as well as recommendations for further research.

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Figure A-6. Sample Abstract Page.

Source: Justin Wiebers, "An Evaluation of CHARACTER COUNTS!_{SM} Character Education Activities in Relationship to the Behavior of Elementary School Children in Sullivan County Tennessee."

Master's Thesis in Agricultural Extension Education, The University of Tennessee, August 2001.

NOMENCLATURE

body weight bwt grams g hour h kilograms kg L liters meter m milligrams mg minutes min milliliter ml mm millimoles

mmhos/cm² millimhos per square centimeter (inverse of milliohms

per square centimeter)

mM millimolar

mmoles/L millimoles per liter

mv millivolts

ohms/cm² ohms per square centimeter

 $\begin{array}{ll} mg & micrograms \\ \mu m & micrometer \end{array}$

μmoles/cm² micromoles per square centimeter

μmoles/h micromoles per hour

Abbreviations

AG alfalfa hay/grain diet BH bromegrass hay diet

CAMP cyclic adenosine monophosphate

CCK cholecystokinin

cIsc corrected short-circuit current

Cl chloride
CO₂ carbon dioxide
CoA coenzyme A

DNA deoxyribonucleic acid

X

Figure A-7. Sample Nomenclature Page.

Source: Jenifer Nadeau, "Pathogenesis of Acid Injury in the Non-Glandular Region of the Equine Stomach: Implications in Gastric Ulcer Disease." Doctoral Dissertation in Animal Science, The University of Tennessee, August 2001.

EGF epidermal growth factor G conductance GIT gastrointestinal tract GUD gastric ulcer disease H^{+} hydrogen ions hydrochloric acid **HC1** Isc short-circuit current Na^{+} sodium ions NRS normal Ringer's solution non-steroidal anti-inflammatory drugs NSAIDs probability level of significance of the statistical test percent of control short-circuit current partial pressure of carbon dioxide PCIsc pCO_2 PD spontaneous potential difference electrical resistance R TID three times daily volatile fatty acids **VFAs** VIP vasoactive intestinal peptide xii

Figure A-7. Continued.

Source: Nadeau, August 2001.

Table 4: Antibiotic Dilutions and Breakpoints (NCCLS 1996)

Antibiotic	Dilution Range (ug/mL)	Breakpoint (ug/mL)
Apramycin Sulfate	2-128	8-512 *>32>512 *
Ceftiofur Sodium	.5-32	≥8
Oxytetracycline	2-128	≥16
Sulfamethazine	8-512	≥256

^{*} E. faecalis high-level resistance testing only

(A)

Table 4: Antibiotic Dilutions and Breakpoints (NCCLS 1996)

Antibiotic	Dilution Range (ug/mL)	Breakpoint (ug/mL)
Apramycin Sulfate	2-128	8-512 *≥32≥512 *
Ceftiofur Sodium	.5-32	≥8
Oxytetracycline	2-128	≥16
Sulfamethazine	8-512	≥256

^{*} E. faecalis high-level resistance testing only

(B)

Figure A-8. Sample Table Formats.
(A) table formatted with three lines, (B) table formatted with full grid.

Source: Patricia Cullen, "Effects of Management and Environmental Conditions on Antibiotic Resistance in Bacteria Associated with Swine." Master's Thesis in Animal Science, The University of Tennessee, August 2001.

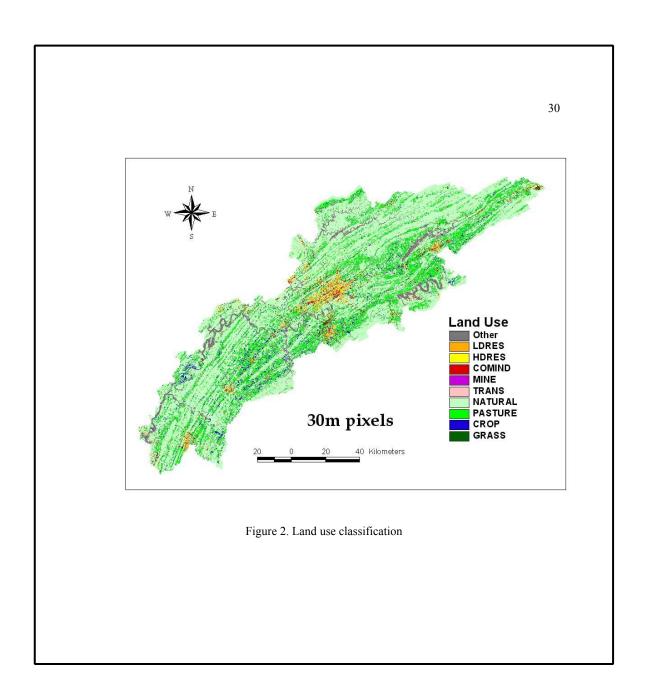


Figure A-9. Sample Figure Format.

Source: Karen Burhenn, "Anthropogenic impacts on riparian forest loss in east Tennessee: a GIS analysis."

Master's Thesis in Ecology and Evolutionary Biology, The University of Tennessee, August 2001.

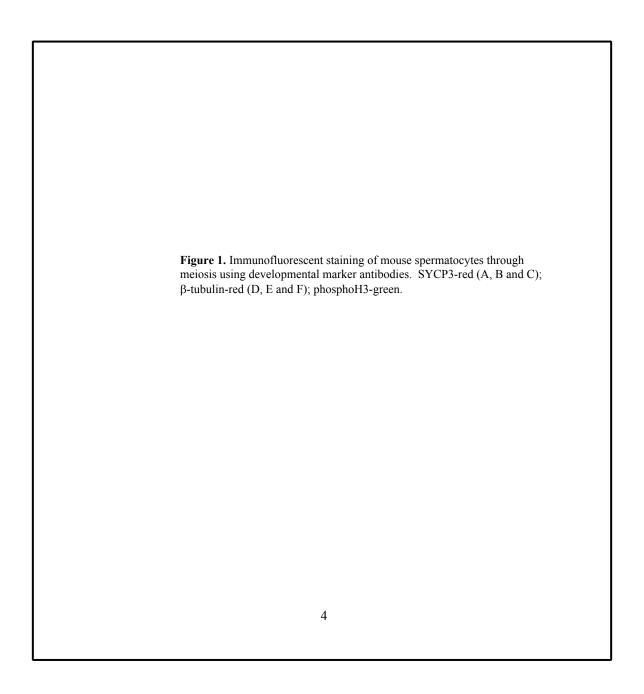


Figure A-10. Sample Figure With Legend Page.

Source: Shannon Eaker, "Analysis of Events Governing the Meiotic Division in Mouse Spermatocytes." Doctoral Dissertation in Biochemistry, Cellular and Molecular Biology, The University of Tennessee, August 2001.

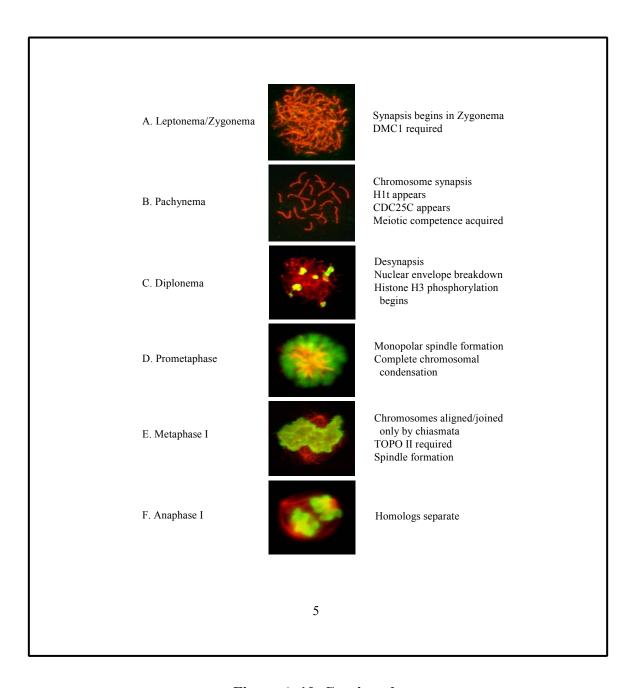


Figure A-10. Continued.

Source: Eaker, August 2001.

phosphoprotein phosphatase calcineurin (Liu et. al., 1991). FK506, after binding with its binding protein receptors, inhibits the phosphatase activity of calcineurin and prevents transcriptional activation of the interleukin-2 gene (Tocci and Sigal 1992, Luo et. al., 1996). This result in inhibition of the T-lymphocyte activation (i.e. immunosuppression) (Shibasaki et. al., 1996). See figure 3.

Relationship to diabetes:

As a result of calcineurin inhibition, FK506 alters multiple biochemical processes in a variety of cells besides lymphocytes. This may be the cause for its adverse side effects including neurotoxicity, nephrotoxicity, diabetogenicity and gastrointestinal disturbances

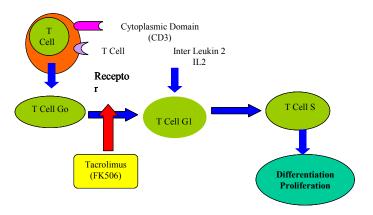


Figure 3: Inhibition of T-cell by FK506

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Figure A-11. Sample Figure Integrated With Text.

Source: Rashika Joshi, "Agouti Mice Models to Study the Diabetogenicity of FK506 (Tacrolimus)." Master's Thesis in Comparative and Experimental Medicine, The University of Tennessee, August 2001.

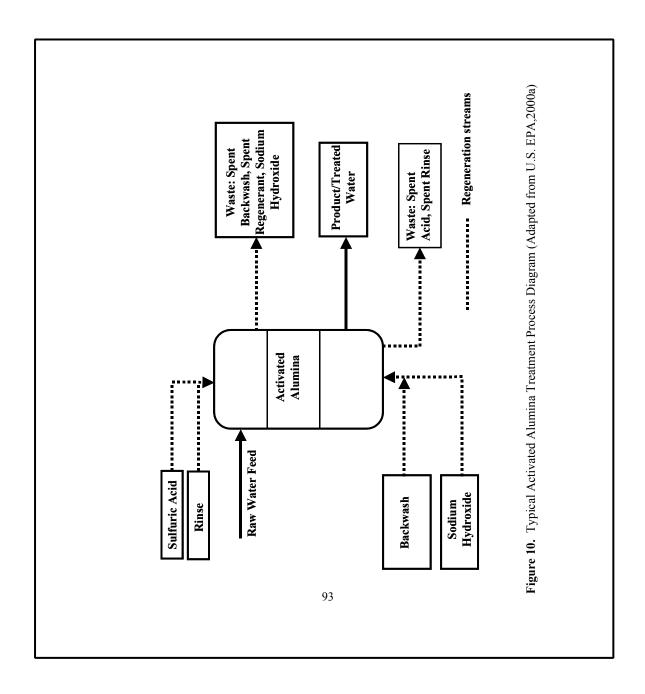


Figure A-12. Sample Figure in Horizontal Orientation on Page.

Source: Greg A. Harrison, "Arsenic Removal for Small Drinking Water Treatment Systems: A Multimedia CD-ROM for Drinking Water Professionals." Master's Thesis in Environmental Engineering, The University of Tennessee, August 2001.

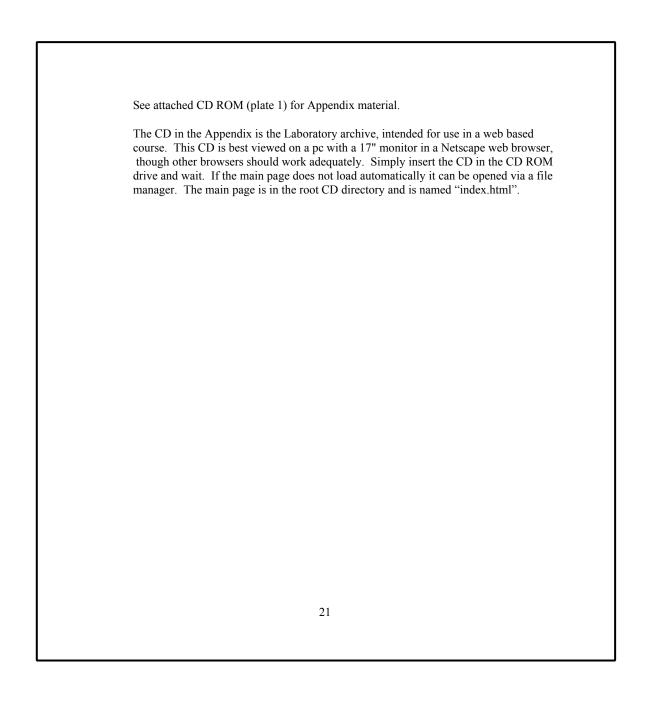


Figure A-13. Sample Appendix Material (Plate) Explanation.

Source: Shawn Ericson, "A CFD Laboratory Archive Supporting the Academic Process." Master's Thesis in Engineering Science, The University of Tennessee, August 2001.

Vita

Corey Shepard Sparks was born in Dickson, TN on November 15, 1976. He was raised in McEwen, TN and went to grade school and junior high school at St. Patrick's School in McEwen. He graduated from Waverly Central High School in 1995. From there, he went to the University of Tennessee, Knoxville and received a B.A. in anthropology in 1998 and a M.A. in anthropology with a minor in statistics in 2001.

Corey is currently pursuing his doctorate in biological anthropology and demography at the Pennsylvania State University, State College, PA.

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Figure A-14. Sample Vita.

Source: Corey Shepard Sparks, "Reassessment of Cranial Plasticity in Man: A Modern Critique of Changes in Bodily Form of Descendants of Immigrants." Master's Thesis in Anthropology, The University of Tennesse, August 2001.

Chapter 2

Patterns of Ice Accumulation and Forest Disturbance During Two Ice Storms in Southwestern Viriginia

This chapter is a lightly revised version of a paper by the same name published in the journal *Physical Geography* in 1999 by Charles Lafon, Daniel Graybeal, and Kenneth Orvis:

Lafon, C.W., Graybeal, D.Y., and Orvis, K.H. Patterns of ice accumulation and forest distrubance during two ice storms in southwestern Virginia. *Physical Geography* 20:97-115.

My use of "we" in this chapter refers to my co-authors and myself. My primary contributions to this paper include (1) selection of the topic and development of the problem into a work relevant to my study of ice storms as forest disturbances, (2) identification of the study areas and vegetation-sampling sites, (3) vegetation sampling and analysis, (4) most of the gathering and interpretation of literature, (5) most of the cartographic work, (6) pulling the various contributions into a single paper, and (7) most of the writing.

Introduction

Disturbance is recognized as an important influence on such community parameters as species composition, species diversity, and vegetation structure (Loucks 1970; Huston 1979, Turner et al. 1997). Small-gap creation resulting from mortality of single canopy trees is generally considered to dominate distrubance regimes in the interior of the eastern forest region (Runkle 1990), but the weight of thick accumulations of freezing rain can bend, break, or topple trees over broad areas. Runkle (1990) concludes that more research is needed to assess the role of such intense, broad-scale disturbances in eastern forests and to determine the interplay between topography and geographic patterns of disturbance. In this paper, we examine disturbance patterns in forests of southwestern Virginia that were affected by two major ice storms in 1994.

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Figure A-15. Sample Journal Article Statement.

Source: Charles Lafon, "Patterns and Consequences of Ice Storms in Forested Appalachian Landscapes." Doctoral Dissertation in Geography, The University of Tennessee, August 200.

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