



THESIS AND DISSERTATION MANUAL

APRIL 2023

This manual has been created on behalf of and in conjunction with Georgia Tech graduate students. The rules in this manual take precedence over previous publications issued by the Office of Graduate Education Thesis Office.

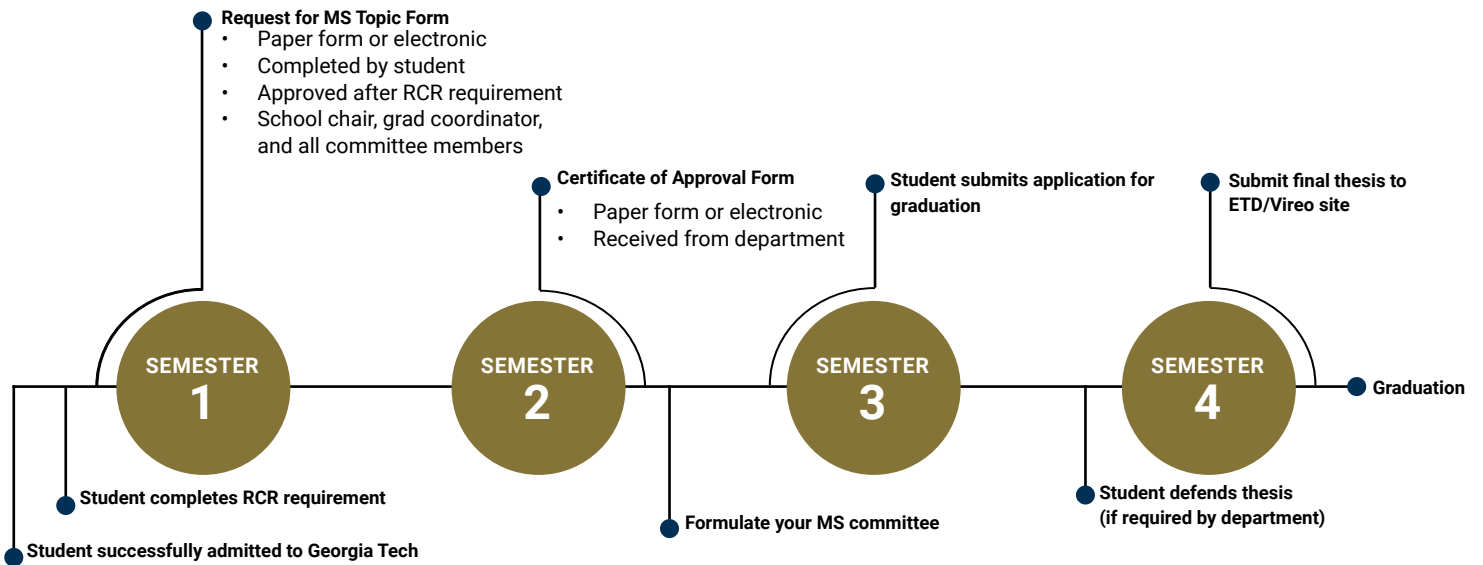
Questions regarding the format of theses/dissertations not adequately answered in this handbook should be directed to:

Office of Graduate Education
 Georgia Institute of Technology
 631 Cherry Street
 Savant Building, Suite 318
 Atlanta, GA 30332-0215

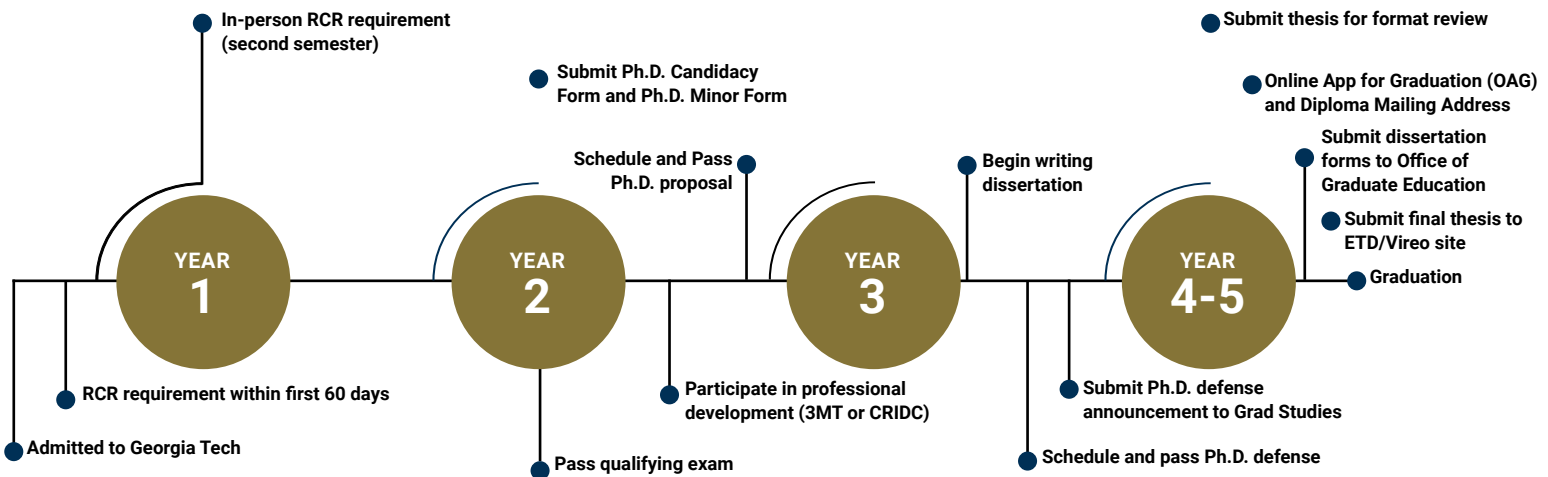
404.894.6811
 thesis@grad.gatech.edu

Office hours: 8 a.m. to 4 p.m.
 For thesis/dissertation coordinator virtual office hours, please visit gradapp.gatech.edu/portal/thesisanddissertation.

PROJECTED LIFE CYCLE OF A MASTER'S STUDENT



PROJECTED LIFE CYCLE OF A PH.D. STUDENT



P R E F A C E

This manual is for students who are in the beginning stages of writing and formatting their theses or dissertations. It will address formatting only and not content relevant to your specific degree program.

FAQ and Common Resources:

Have you completed Responsible Conduct of Research (RCR) training for master's and Ph.D. students?

For further information, consult rcr.gatech.edu.

Have you been admitted to Ph.D. candidacy, submitted the Doctoral Minor Form, or completed your MS Topic Form?

If not, see the forms here: grad.gatech.edu/theses-dissertations-forms.

Have you submitted or reactivated your Online Application for Graduation?

If not, consult the registrar's office here: registrar.gatech.edu/info/online-application-graduation-oag-graduate-students.

Are you aware of the semester's thesis and dissertation deadlines?

Thesis and dissertation deadlines are firm. Please make sure that you are aware of the deadlines. All deadlines are listed here: grad.gatech.edu/theses-dissertations-deadlines.

Have you scheduled and passed your Ph.D. oral defense?

The student's major department should advise the Graduate Education Thesis Office of the date, time, and location of the presentation at least 10 working days in advance. The oral defense committee members should be listed on this announcement. The oral defense should be scheduled no later than two weeks prior to the thesis deadline so that you will have sufficient time for revisions and copying. Please send all defense announcements to announcements@grad.gatech.edu.

Registering for Commencement

Register five weeks prior to graduation. For more information, please visit the Commencement Office website (commencement.gatech.edu).

Rules for Enrollment During Last Semester

Georgia Tech policy requires that graduate students must be enrolled during the semester in which they graduate and also that the minimum credit hour load for graduate students is three credit hours (except as described in the [Policy on Hour Loads for Graduate Students](#)).

Waiver of Enrollment

The requirement that a graduate student be enrolled during the semester of graduation may be waived if the student is no longer using Institute or faculty time during the semester of graduation **AND**:

1. the student was duly registered the previous term (usually the term in which the successful final defense took place); and
2. the final and complete electronic thesis is submitted, all thesis-related forms are received by the Graduate Education Thesis Office, and all other graduation-related requirements are satisfied **before the end of the registration period** the semester of graduation.

The intent is that a student who has been properly registered during the period of thesis completion and who has completed all work at Georgia Tech and therefore has nothing to register for should not be required to enroll another term just to graduate. The Enrollment Waiver is available from the "Forms" menu at the Graduate Education Thesis

Office website (grad.gatech.edu/theses-dissertations-forms).

The Waiver of Enrollment (“Enrollment Waiver”) form signed by the student and his or her department should be turned into the Graduate Education Thesis Office at the same time as the Certificate of Thesis Approval Form.

The waiver of enrollment **does not** waive the requirement that the student file or reactivate a degree petition (Online Application for Graduation) by the deadline for the term in which the degree is to be awarded. There are no exceptions to the enrollment waiver deadline for thesis students. Students must meet the deadline or register as required.

One-Hour Rule

A student who does not meet the enrollment waiver requirements may enroll for just one hour in the term of graduation. This exception to the normal minimum of three hours for graduate students may be used only **once per degree**. No special form or permission is needed, provided that you are a degree candidate.

Students who have enrolled for one hour only more than one time per degree are not eligible to take advantage of the waiver of enrollment. They must enroll for the normal minimum of three hours in the semester of graduation.

Students should address any questions or concerns regarding enrollment during the last semester to the Graduate Education Thesis Office before the end of registration; no additions or changes in registration are allowed after the close of registration.

Please note that these exceptions **do not** alter the credit-hour load a student must take in order to meet financial aid, fellowship or assistantship eligibility, etc. Students on F-1 visas should speak with the Office of International Education before carrying a reduced course load or not enrolling. Students intending to enroll in the Student Health Insurance Plan must be enrolled in a minimum of four credit hours to participate in the plan.

Policy on Advisement of Graduate Students and the Appointment of Thesis Advisory Committees

Doctoral Theses:

There are two committees that function to advise, approve, and conduct the final doctoral oral examination of the thesis and the student’s knowledge of the field in which it lies.

The first committee is called the Thesis Advisory Committee or the Thesis Reading Committee and consists of at least three people, one of whom is the Thesis Advisor. This committee approves the research topic, provides advice and guidance during the research, and is charged with approving the thesis when the research is completed and presented as the doctoral thesis. When the Thesis Advisory Committee considers the thesis to be satisfactory, a recommendation is made to the Vice Provost for Graduate and Postdoctoral Education for the appointment of the second committee, which is called the Final Doctoral Examination Committee, and it consists of at least five individuals.

The Thesis Advisory Committee consists of at least three members satisfying the following: (1) the thesis advisor shall be a member of the Graduate Thesis Faculty (which is defined below). If the thesis advisor is an Adjunct Faculty or part-time faculty member, then there must be a co-advisor who is a full-time member of the Graduate Thesis Faculty. (2) the majority of committee members shall be members of the Graduate Thesis Faculty. The Committee is approved by the Graduate Curriculum Committee or its equivalent in the academic program, recommended by the School Chair or the faculty director of graduate studies in the program, and appointed by the Vice Provost for Graduate and Postdoctoral Education.

The Final Doctoral Examination Committee consists of at least five persons including at least three members of the Graduate Thesis Faculty. This committee always contains the Thesis Advisory Committee members and others as appropriate, who are recommended by the school or college to the Vice Provost for Graduate and Postdoctoral

Education for approval. The thesis advisor will serve as the chair of the Final Doctoral Examination Committee. At least one member of the Final Doctoral Examination Committee must be external to the unit in which the student is enrolled. A committee member is eligible to be the “external” member if they have a terminal degree and either 1) are a faculty member from a unit that is distinct from the unit in which the student is enrolled, or 2) are not employed by Georgia Tech and are active in research related to the topic of the dissertation.

It is recognized that some Schools and Colleges may wish to appoint a Thesis Advisory Committee that consists of five or more persons, and to recommend this committee to serve as the Final Doctoral Examination Committee. Where the constraints outlined above are met for both committees, this is permissible.

Master’s Theses

For Master’s Thesis advisement, the Thesis Advisory Committee consists of at least three members, the majority of whom must be members of the Graduate Thesis Faculty. The thesis advisor who serves as the Chair of the Thesis Advisory Committee must be a member of the Graduate Thesis Faculty. If the thesis advisor is an Adjunct Faculty or part-time faculty, then there must be a co-advisor who is a full-time member of the Graduate Thesis Faculty. The committee is recommended by the School Chair or the faculty director of graduate studies in the program and appointed by the Vice Provost for Graduate and Postdoctoral Education.

** “Adjunct” does not indicate formal appointment but rather appointment as indicated in this policy statement.*

Graduate Thesis Faculty

The Graduate Thesis Faculty of an academic program consist of the tenure-track faculty in the program plus any additional faculty (emeritus, academic, research and adjunct) who have been approved to serve as primary thesis advisors by the Graduate Curriculum Committee or equivalent governing faculty committee of that academic program based on the following primary qualifications and any additional criteria established by that academic program faculty:

1. *Active in research or scholarly work*
2. *Experience or training in teaching or mentoring graduate students*
3. *Terminal degree*

In the case of interdisciplinary programs, the governing faculty committee for that program may choose to include both the Graduate Thesis Faculty of a student’s home school and the Graduate Thesis Faculty of the academic program when determining the membership of thesis committees.

The Office of Graduate Education will maintain the list of non-tenure track faculty approved to be Graduate Thesis Faculty, as provided to them by the academic units. The Office of Faculty Affairs maintains the list of tenure-track faculty; together these two lists comprise the Graduate Thesis Faculty. This Graduate Thesis Faculty designation is meant for the purposes of this policy only and is not a faculty rank. The designation alone does not carry with it any employment implications or rights as outlined by Georgia Tech Faculty governance.

Note on Joint Degrees and Departments

For joint (interinstitutional) departments or degree programs, committees should have at least one faculty member from each institution, and a majority should be joint program faculty. Joint program faculty will have undergone a nomination and appointment process in the joint program to qualify for the right to advise students in the joint program.

Policy on Publication of Theses

A policy of the Georgia Institute of Technology is that Doctoral and Master’s Theses are openly published. Extraordinary delays are not to be allowed to protect the proprietary interests of sponsors.

It is anticipated that all Ph.D. theses and a significant fraction of master's theses be published in the open, refereed literature.

In all cases, doctoral research should meet the "Guidelines for Ph.D. Dissertation Research", and in no situation should these be compromised to allow for concealing important research results because of security classification or a sponsor's proprietary interest.

Students may routinely elect to have publication of their theses withheld for a period of one year, if recommended by the student's thesis advisor. Requests for extensions beyond one year must be justified and approved by the Vice Provost for Graduate and Postdoctoral Education.

A Georgia Tech doctoral dissertation in its final form may not be used or have been used to meet the requirements for a separate degree at another institution.

Guidelines for Ph.D. Dissertation Research

1. The research should provide a useful educational experience for the student emphasizing creativity, independent action and learning, research methodology, and scholarly approach.
2. The research must be relevant to the field in which the student is pursuing a degree.
3. The contributions to knowledge must be original and as such, should represent a substantial addition to the fundamental knowledge of the field or a new and better interpretation of facts already known. The research must demonstrate creativity. Dissertations based on well-known principles, techniques, and models applied to situations only somewhat different from previous applications are not acceptable.
4. The dissertation should contain clear statements about (a) the relevance and importance of the problem and (b) the significance, originality, and generality of the research results. The relationship of the research to the literature of the field should be described.
5. The research should possess the major characteristics of the scientific method, namely objectivity and reproducibility. Assumptions should be clearly stated in both experimental and theoretical research.
6. The dissertation should reflect a level of competence indicative of significant achievement beyond the master's level. Thus, the research is expected to draw directly upon advanced learning in the student's major field and demonstrate mastery of that knowledge.
7. The dissertation must demonstrate understanding of the theory and methodology related to its main thrust. Further the dissertation should reflect knowledge of the application area.
8. The research should result in at least one paper or creative work that is publishable through an external peer review process for the public.
9. The dissertation should demonstrate a high degree of proficiency in written communication of research results. It should conform to the Institute's requirements as outlined in the Office of Graduate Studies and Research "Manual for the Preparation of Graduate Dissertations and Thesis."

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PART 1: THE ETD PROCESS AND PUBLICATION

1. ELECTRONIC THESES AND DISSERTATIONS (ETDs)

All degree candidates must submit their final work electronically. Although the dissertation or thesis itself must be submitted electronically, most supporting documents must be submitted via DocuSign. See the **Checklist of Documents to be Turned in at the Same Time as Electronic Thesis/Dissertation** at the following site: grad.gatech.edu/theses-dissertations-forms.

1.1 WHAT ARE THE ADVANTAGES?

- You save time and money on purchasing expensive paper, printing, and reprinting corrections.
- There are fewer signatures to get (committee members must sign only the Certificate of Thesis Approval).
- Your work becomes public as soon as you graduate (unless you specify otherwise).
- You can refer prospective employers to your ETD as a convenient sample of your work.

1.2 WHAT ARE THE DISADVANTAGES?

- Some journals may consider an ETD to be previously published work. **We encourage you to carefully read any publishing agreements you sign and to try, whenever possible, to obtain an agreement that allows you to include your research in a freely available ETD.** You can elect to withhold publication of your ETD for one year with the approval of your advisor, which may satisfy a publisher. In addition, journal articles and books are typically written quite differently than theses or dissertations.
- Some “tricks” used to make formats come out right in printed documents may not work in electronic documents.
- For most Georgia Tech students, there are no other disadvantages.

1.3 HOW ETD SUBMISSION WORKS

Go to the Electronic Thesis and Dissertations website (thesis.gatech.edu).

Enter basic information about yourself and your thesis via an online form. You will also be required to upload your thesis or dissertation in PDF format. The Graduate Education Thesis Office checks your electronic document and lets you know about any corrections you must make via email. Make the corrections and submit the corrected file. If the Graduate Education Thesis Office has all of your pre-thesis and thesis-related documents, they will approve your thesis and notify the registrar’s office that you are eligible to graduate.

1.4 FILE FORMATS

It is the responsibility of the author to reformat the document into a PDF file, check the reformatted document for accuracy, and submit the PDF document to the Georgia Tech ETD website for publication. No compression should be used. No changes can be made to the electronic thesis once it is approved.

The Georgia Tech Library has software to create PDF files and technical support staff if you need assistance with it.

All fonts used should be embedded in the document. Internal links to multimedia files are acceptable. If multimedia elements are used in the document, file formats should be identified in the dissertation/thesis abstract. Acceptable file formats include the following:

IMAGES	VIDEO	AUDIO
GIF (.gif)	Apple Quick Time (.mov)	AIF (.aif)
JPEG (.jpeg)	Microsoft Audio Video	CD-ROM/XA
Interleaved (.avi)	CD-DA	MIDI (.midi)
PDF (.pdf) use Type 1	MPEG (.mpg)	MPEG-2
PostScript fonts		SND (.snd)
TIFF (.tif)		WAV (.wav)
PNG (.png)		MPEG-2

1.5 FILE NAMING CONVENTIONS

Naming conventions are no longer necessary for the upload of your ETD file. The new Vireo System (implemented spring 2013) allows for each file, once uploaded, to have its own unique extension.

In order to add multimedia files, students must be logged into thesis.gatech.edu, and follow the instructions.

1.6 DATASETS AND SUPPLEMENTARY FILES

The ETD/Vireo system allows students to upload supplementary files including datasets. The size limit of all files (including the PDF of the ETD) is 2 GB, with each individual file size not to exceed 512 MB. We encourage all students to upload their datasets and supplementary files along with their final thesis/dissertation. Advisors must approve all supplementary files and datasets that are uploaded to the ETD.

In the event that the supplementary files and datasets exceed the allotted file size, or if you would like your dataset to have its own record separate from your thesis/dissertation, please contact the Library's research data librarian at library.gatech.edu/experts?s=&specialties=1280. A separate record will be created for your supplementary files, which will be linked to your SMARTech submission of your thesis/dissertation.

1.7 WHAT CHANGES AND WHAT DOES NOT WITH ELECTRONIC SUBMISSION

- Students no longer have to submit any paper copies of their thesis to the Graduate Education Thesis Office. We recommend you send a PDF for a format check to thesis@grad.gatech.edu. Paper copies for your advisor and department are your responsibility.
- The Thesis Approval Page will still be the second page in the thesis, but it will not have signatures and there should not be any lines for signatures. You must list the committee members who approved your thesis or dissertation with their affiliations, and be certain you type in the "Date Approved." That should be the date the last committee member approved the final draft of your thesis (MS students) or the date of your defense (or presentation for MS students).
- Everyone must still submit a copy of the Certificate of Thesis Approval to the Graduate Education Thesis Office, preferably via DocuSign. That form must have original or digital signatures of all committee members, all on the one form, as well as the chair or graduate coordinator of your department. If by any chance a committee member is remote and unable to sign the form, the school chair or graduate coordinator can sign on their behalf with written permission from said committee member (via email). Email should be attached to the Certificate of Thesis Approval form. However, remote committee members can use DocuSign to sign forms. If there is an issue with their location and they are unable to access the form, contact the Office of Graduate Education.
- Doctoral students must still turn in required forms located in the checklist (http://grad.gatech.edu/sites/default/files/documents/thesis_checklist_spring_2020.pdf). You must submit one copy of your abstract and dissertation title page along with your supporting documents. Those documents can be submitted as a PDF to thesis@grad.gatech.edu.
- You must still have all documents and the thesis/dissertation submitted and approved by the Graduate Education Thesis Office by the thesis deadline. (See deadlines here: grad.gatech.edu/theses-dissertations-deadlines.)

See Checklist for Documents to Turn in with Electronic Submissions on the web at grad.gatech.edu/theses-dissertations-forms.

2. THE UMI DISSERTATION PUBLISHING SERVICES AND FEES

Doctoral students may elect to submit the abstract of their dissertation or the entire dissertation to Dissertation Abstracts for processing and distribution. Students should discuss this option with their major professor prior to making a decision to utilize this service. The Office of Graduate Education is no longer involved in this process.

2.1 DISSEMINATING YOUR THESIS OR DISSERTATION

There are a number of free or low-fee options to disseminate your thesis. Please discuss with your advisor the best option. We recommend the following:

- **Academia.edu:** Includes 5 million uploaded papers, shared with 22 million members. Requires free account. academia.edu
- **ResearchGate:** Accepts publications and data. Six million members have posted 75 million documents, figures, and datasets. Requires free account registration. researchgate.net

- **Figshare:** Began as a data and figure repository. Now includes publications, code, and thousands of theses/dissertations. Requires free account registration. figshare.com
- **ProQuest (formerly UMI):** ProQuest has been archiving theses for many years and recently stopped charging for digital submission. A subscription is required to access the full texts of the ETD's submitted to ProQuest. Indexed in several science and technology databases. Contact dissspub@proquest.com for submission information. Georgia Tech stopped requiring submission to ProQuest in 2012. proquest.com

2.2 EXTRA BOUND COPIES OF THE DISSERTATION

Students are responsible for printing their own copies and give them to a private binding company. A number of commercial printing companies such as FedEx Office and Print and Staples provide binding options. The Office of Graduate Education recommends www.PhDBookBinding.com for your academic publishing needs.

3. COPYRIGHTING THESES/DISSERTATIONS

3.1 SMARTeCH AGREEMENT FORM

The Library also manages Georgia Tech's institutional repository SMARTeCh, an archive for Tech-produced scholarly materials and research. Authors depositing their materials in SMARTeCh retain copyright to their research materials, and grant Georgia Tech a nonexclusive license to distribute and preserve the materials for educational purposes. Therefore, you must include the SMARTeCh Repository Agreement Form along with your final documents available here: grad.gatech.edu/theses-dissertations-forms.

Students and their advisors should give careful consideration to the desirability of registering the copyright. It is not necessary to register your work with the U.S. Copyright Office in order to claim copyright protection. But, you can retain more legal protection. Students automatically have copyright for life plus 70 years after death. However, it is required to mark your work with a copyright notice. General information regarding copyrights can be obtained from the U.S. Library of Congress Office at copyright.gov/ or library.gatech.edu.

It is optional that students add a copyright to the cover of the thesis. Copyright information should be placed at the bottom of the title page using the following format:

Copyright © John Roger Stephens 2014

3.2 USE OF COPYRIGHTED MATERIALS AND PERMISSIONS

If you have used figures or documents from other sources (i.e., scholarly journals), the onus is on the student to seek permission for the reuse of copyrighted materials. The student is required to obtain written permission from the author or publishers to quote extensively from copyrighted material. Such permission is usually granted on condition that acknowledgment is made. If payment is required, this is the author's responsibility. Permission for the use of all such materials must be obtained before the thesis/dissertation is submitted to the Graduate Education Thesis Office.

You must have prior permission from the publisher to reprint large sections of published work, even if you are the author. If written permission is granted, please include these permission letters granted by the source in a separate appendix in your thesis/dissertation, or upload as supplementary files as part of the ETD.

3.3 CREATIVE COMMONS LICENSING

Creative Commons licenses help creators (licensors) retain copyright while allowing others to copy, distribute, and otherwise reuse their work. You can specify noncommercial reuses only.

Licenses work around the world and last as long as applicable copyright lasts.

Find more information at creativecommons.org/licenses.

4. ERRATA AND REDACTIONS

4.1 CHANGES AFTER SUBMISSION OF THE THESIS: ERRATA AND REDACTION

After the thesis has been submitted to the Georgia Tech Library by the Graduate Education Thesis Office, all changes made to a thesis must have prior approval from both the student's advisor and the vice provost for Graduate and Postdoctoral Education. The Office of Graduate Education will approve on behalf of the Vice Provost for Graduate Postdoctoral Education.

4.2 ERRATA IN A THESIS OR DISSERTATION

When the purpose is to correct significant errors in content, the student should create an errata sheet using the form and instructions and obtain approval from both thesis supervisor or program chair, and the vice provost for Graduate and Postdoctoral Education.

4.3 REDACTIONS IN A THESIS OR DISSERTATION

If the purpose of the change is to excise classified, proprietary, or confidential information, the student should fill out the application and have the request approved by the thesis supervisor or program chair, and the vice provost for Graduate and Postdoctoral Education. Whenever possible, students and supervisors should vet thesis content carefully before submission to avoid both scenarios.

Both forms can be found here: grad.gatech.edu/theses-dissertations-forms.

PART II: DOCUMENT AND FORMAT GUIDELINES

5. DOCUMENT APPEARANCE

It is now a requirement for all theses and dissertation students to submit their work electronically.

For thesis format checking, emailing a PDF of the document is acceptable. You may send a PDF to format check to thesis@grad.gatech.edu.

The overall appearance of the thesis should be professional and consistent. Text should not wrap around tables or figures. Tables and figures in the body of the thesis should be large enough to read clearly. Text should be all black with the exception of figures, tables, and appendices. There should be enough space between text and figures/tables to make it easy to tell where the text ends and restarts. Any figures, illustrations, diagrams, tables, etc. must be of high quality.

5.1 FONTS

It is preferred that only one font be used throughout the document. A proportional font such as Arial or Times New Roman will take less room than a fixed font such as Courier.

The Graduate Education Thesis Office recommends that you choose from the following fonts (all except Courier are proportional):

FONT	SIZE
Arial	11 pt
Courier	11 or 12 pt
Century Gothic	11 or 12 pt
Geneva	11 pt
Helvetica	11 or 12 pt
Times/Times New Roman	12 pt

Common symbols, such as scientific fonts, may be used in the body of the thesis, but not in the title of the work. Thesis or dissertation titles containing formulas, symbols, superscripts, Greek letters, or other nonalphabetical symbols should use word substitutes for those symbols (e.g., “Gamma Ferric Oxide Dispersion...,” “...Alpha- and Beta-Globulin...,” “...The Neodymium-Barium-Copper Oxide System...”)

5.2 MARGINS

- Right Margin Always 1"
- Bottom Margin Always 1"
- Left Margin Always 1.5" (because copies still may be printed and bound)

Master's only: If you are sure that your thesis will not be bound, then a 1" left margin is permissible.

- Major Headings (title page, chapter, etc.) – see below:
 - » **Option 1:** 1" top margin for all pages including major headings (standard APA format)
 - » **Option 2:** Major headings begin 2" from the top of the page. Whichever you choose, you must be consistent.

5.3 SPACING

The text of the thesis or dissertation should generally be double-spaced. Line spacing of 1.5 may be used for most fonts, however, so long as the distance between two lines measured from bottoms of vowels in each line is at least 5/16." So, for example, Helvetica may be done in 1.5 line spacing, whereas Arial 11 must be double-spaced. **When in doubt, double space.**

Footnotes, references (double-space between entries), quotations, and table/figure captions and legends are single-spaced. Leave at least two blank lines before and after tables and figures except at the very top or bottom of pages.

5.4 PAGE NUMBERS

- Page numbers should be centered at the bottom of the page within the 1" margin but no less than 1/2" from the bottom of the page.
- The pages before chapter I are numbered consecutively using small Roman numerals.
- Although the title page and approval page count as pages i and ii, respectively, numbers should not appear on these pages.
- The first page to bear a Roman numeral is the acknowledgments, which will be numbered page iii unless there is a dedication or epigraph preceding it. Numbering with Roman numerals continues through the summary, which is the last page with a Roman numeral.
- Arabic numbers begin at the first page of chapter I. The numbering begins at 1 and continues to the end of the document, including appendices, references, and the vita, when present.
- All pages beginning with page 1 are counted, including blank pages and section divider pages. The sole exception is the title pages for multiple volumes.

5.5 FOOTNOTES

There are a lot of approaches to footnoting in publications. The Graduate Education Thesis Office has no overall requirement other than to be consistent. All footnotes must be single-spaced, and conform to margin and font requirements.

6. ARRANGEMENT OF CONTENTS

6.1 INTRODUCTION

Every thesis/dissertation is composed of three content divisions:

- Preliminary pages
- Text pages
- End pages and reference list

Each content division has several sections, which are to be arranged in the order described below and conform to examples that are given at the end of the guidelines.

6.2 VOLUMES

A thesis or dissertation must be divided into volumes when it will be thicker than 2 1/2" when printed and bound. Division into volumes is necessitated only by physical constraints of binding. It is suggested but optional for electronic master's theses. More information is given in the section on "Multiple Volumes," Chapter 11.

Some theses are composed of two or more bodies of research that are only loosely connected or are a collection of journal-style chapters. In these cases, the thesis/dissertation may be divided into two or more parts.

6.3 ORDER OF PAGES

Preliminary Pages

- Title page
- Approval page
- Epigraph (optional)
- Dedication (optional)
- Preface (optional)
- Acknowledgments
- Table of contents
- List of tables
- List of figures

- List of symbols or abbreviations [nomenclature]
- Summary

The Body of the Work: The Text Pages

- Parts
- Chapters
- Sections and subsections

End Pages

- Appendix or appendices (optional)
- References
- Vita (optional – Ph.D. only)

6.4 PRELIMINARY PAGES

In the sections that follow, “at the top of the page” will mean just above the 2” margin (if you use the traditional format), or just below the 1” margin (if you use the new format) (cover page of each new chapter ONLY). Whichever you use, you must be consistent.

Title Pages

Thesis or dissertation titles containing formulas, symbols, superscripts, Greek letters, or other nonalphabetical symbols should use word substitutes for those symbols (e.g.; “**Gamma Ferric Oxide Dispersion...**,” “**...Alpha- and Beta-Globulin...**,” “**...The Neodymium-Barium-Copper Oxide System...**”)

Center, single-space, and type each of the following on a new line. Leave enough space between each group of sentences below so that text covers the page vertically.

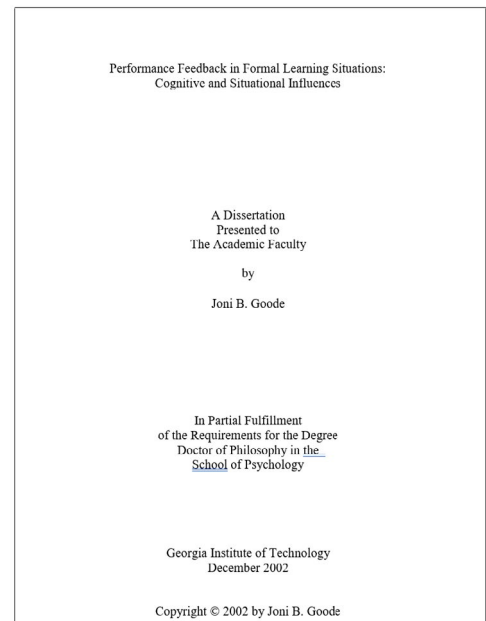


Figure A.1 Example of Dissertation Title Page With Copyright (REQUIRED)

Title in Title Case Capitalization and Bold Letters

[ten single-spaced blank lines]

**A Dissertation (or Thesis) Presented to
The Academic Faculty**

[three single-spaced blank lines]

By

[three single-spaced blank lines]

Student's Name

[four single-spaced blank lines]

In Partial Fulfillment

**of the Requirements for the Degree Doctor of Philosophy in [Major] or
Master of Science in [Major]**

School or Department

[six single-spaced blank lines]

Georgia Institute of Technology

[one single-spaced blank line]

[Month, Year of Graduation]

Note: If you are part of a joint program (i.e., Public Policy or Biomedical Engineering), please include the additional institution(s) name (i.e., Emory University, PKU, or Georgia State).

The optional copyright information is placed at the bottom of the title page using the following format (additional information on copyrighting can be found in Part I, Chapter 5 of this manual or at www.copyright.gov):

Copyright © student's name and year

Approval Page

Because all theses/dissertations are submitted electronically, you no longer have to obtain signatures on the Thesis Approval Page. The Thesis Approval Page will still be the second page in the thesis, but it will not have signatures. You must list the committee members who approved your thesis or dissertation and their respective affiliations (departments, universities, organizations, etc.). If you have fewer than four committee members, use the one-column style. If you have four or more committee members, use the two-column style (see Appendix A for samples). Be certain you type in the "Date Approved." That should be the last date the last committee member approved the final version of your thesis.

Note: Only the Thesis Reading Committee members (those who signed the Master's Thesis Topic Approval Form or Admission to Candidacy Form) must sign the Certificate of Thesis Approval Form. Any additional members on the Oral Defense Committee may also sign the certificate if you wish.

Performance Feedback in Formal Learning Situations:
Cognitive and Situational Influences

Approved by:

Dr. Donald B. Drake, Advisor
School of Psychology
Georgia Institute of Technology

Dr. Minerva Topoligo
College of Computing
Georgia Institute of Technology

Dr. K. G. Barnes
Ergonomic Design Institute
Georgia Institute of Technology

Date Approved: November 11, 2003

Figure A.2 Example of Thesis Approval Page
(Single-column Format: MS Students)

In addition, please adhere to the following guidelines:

- Count page, but do not print the page number.
- Type the title centered at the top of the page (should be at same line placement as title on the cover page).
- Space down several times (10 single lines or five double-spaced lines).
- Type on the first line of each entry the full name of the committee member who approved your thesis, followed by the school affiliation (e.g., School of Chemistry), then the institution or organization in italics (e.g., Georgia Institute of Technology). If there are more than four members, use two columns.
- Leave one or two blank lines. Type "Date Approved" and the date the thesis was approved. If using the two-column format, the date approved should be under the right-hand column.



Figure A.3 Example of Thesis Approval Page (Two-column Format: Ph.D. Students)

Epigraph (optional)

An epigraph is a brief quotation placed at the beginning of a written work that suggests its theme. It is not necessary to identify the epigraph by labeling it "epigraph."

- Count but do not number page.
- If used, text should be brief and centered on page.
- Do not use quote marks or italics in the quote.
- Give only the name of the author and the reference title; the full reference should go in the main references section or bibliography.
- The epigraph does not appear in the table of contents.

Dedication (optional)

- Count but do not number page.
- If used, text should be brief and centered on page.
- The Dedication does not appear in the table of contents.

Acknowledgments (type "ACKNOWLEDGMENTS" centered at the top of the page)

- Count and number page(s).

Note: All major headings should start at the same position at the top of each page. (e.g., Title, ACKNOWLEDGMENTS, TABLE OF CONTENTS, LIST OF TABLES, LIST OF FIGURES, ... REFERENCES, etc.)

- Leave three blank lines. Begin typing the text. The text must be double-spaced.
- Most theses and dissertations include a brief statement of appreciation for, or recognition of, any special assistance.
- Printed page numbering begins at this page with lower case roman numerals.

- The acknowledgments is the first section to appear in the Table of Contents.

Table of Contents

Table of Contents (type “TABLE OF CONTENTS” centered at the top of the page)

- Count and number page(s).
- Leave three blank lines. Type listings and page numbers.
- Page numbers should line up flush right. For example, the “9” in page “79” should line up with the “9” in page “129.”
- 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/ dissertation.
- Leave one blank line between all main title entries (e.g., Dedication, Acknowledgment, List of Tables, Chapter Headings). For subsections, it is allowable to use either zero or one blank line between entries, so long as the work is easily readable (as determined by the Graduate Education Thesis Office).
- Any wrap-around text should be single-spaced
- All materials that follow the table of contents must be listed in the table of contents, including lists of tables and figures, appendices, and references. Do not list the table of contents and its corresponding page number on the table of contents.

List of Tables (type “LIST OF TABLES” centered at the top of the page)

- Leave three blank lines and type the listings.
- Page numbers should line up flush right. For example, the “9” in page “79” should line up with the “9” in page “129.”
- The list of tables uses the captions as they appear above the tables in the text.

List of Figures (type “LIST OF FIGURES” centered at the top of the page)

- Count and number page(s).
- Leave three blank lines and type the listings.
- Page numbers should line up flush right. For example, the “9” in page “79” should line up with the “9” in page “129.”
- The list of figures uses the captions as they appear below the figures in the text. If captions are very long, they may be truncated in the list of figures.

TABLE OF CONTENTS	
ACKNOWLEDGEMENTS	iv
LIST OF TABLES	vii
LIST OF FIGURES	ix
LIST OF SYMBOLS AND ABBREVIATIONS	x
SUMMARY	xi
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: LITERATURE REVIEW	7
CHAPTER 3: METHODOLOGY	32
3.1 Experimental Design	32
3.2 Procedures	40
CHAPTER 4: RESULTS	63
4.1 Experimental Evaluations	63
4.1.1 Apparatus Design	64
4.1.2 Usability Evaluations	70
CHAPTER 5: CONCLUSIONS	83
CHAPTER 6: RECOMMENDATIONS	118
APPENDIX A: RAW DATA	130
REFERENCES	155
VITA	160

Figure A.4 Example of Table of Contents

TABLE OF CONTENTS	
ACKNOWLEDGEMENTS	iv
LIST OF TABLES.....	vii
LIST OF FIGURES.....	ix
GLOSSARY (SYMBOLS OR ABBREVIATIONS).....	x
SUMMARY	xi
CHAPTER 1: INTRODUCTION.....	1
CHAPTER 2: LITERATURE REVIEW.....	7
CHAPTER 3: METHODOLOGY	32
3.1 Experimental Design	32
3.2 Procedures	40
CHAPTER 4: RESULTS	63
4.1 Experimental Evaluations.....	64
4.1.1 Apparatus Design	66
4.1.2 Usability Evaluations.....	70
4.2. Survey Data.....	73
CHAPTER 5: CONCLUSIONS	83
CHAPTER 6: RECOMMENDATIONS	118
APPENDIX A: RAW DATA	130
REFERENCES	155
VITA.....	160

Figure A.5 Example of Table of Contents (Compact Spacing)

LIST OF TABLES	
Table 1	Description Statistics and Intercorrelations 4
Table 2	Attributional Subgroup Intercorrelations..... 7
Table 3	Regressions of Different Dimensions of Performance Feedback 10
Table 4	Attributional Subgroup Regressions of Performance Feedback Giving Behaviors on Performance Feedback Antecedents..... 32
Table 5	Subgroup Analysis Regarding the Use of Negative Feedback 43

Figure A.6 Example of List of Tables

- Figures with multimedia files should include the file information in the list of figures.

List of Symbols (type “LIST OF SYMBOLS,” “LIST OF ABBREVIATIONS,” or “NOMENCLATURE” centered at the top of the page)

- Count and number page(s).
- Other names of lists acceptable to the department or college may be allowed.

Summary (type “SUMMARY” centered at the top of the page)

- Count and number page(s); Roman numerals end with this section.
- Give a concise overview of the whole thesis/dissertation.
- The summary is double-spaced.
- The summary may contain the same content as the doctoral abstract but the latter is formatted differently. The abstract is an external document with information required by the Office of Graduate Education. The summary is part of your thesis/dissertation. It should NOT be titled “executive summary.”

6.5 THE BODY OF THE WORK: THE TEXT PAGES

The body is the substance of the thesis/dissertation. All pages within the body count and are numbered consecutively with Arabic numerals.

Parts

When a thesis is divided into parts, the thesis will begin with an introductory chapter that will set up the questions to be explored in the various chapters or parts of the work, as well as any interconnections that may exist.

Each part should be preceded by a part-title page. Part-title pages display only the word “part” followed by the part number, and any part title. Since the introduction is to the entire paper, whether it is titled “CHAPTER 1” or not, it precedes the “Part 1” divider. Therefore, the first part-title page will follow the introduction, and the first chapter after the first part-title page will be “CHAPTER 2.” Part-title pages count and bear printed page numbers.

Chapters

All theses/dissertations should be divided into chapters. Each chapter will start on a new page. Chapters do not have title pages. After typing the chapter heading, leave three blank single-spaced lines (or equivalent) before starting the text.

LIST OF FIGURES	
Figure 1	Typical Organizational Structure Between Nonprofit Housing Owners, Property Management Company, and Owners 12
Figure 2	Basic Conceptual Model of Residential Satisfaction 19
Figure 3	Residential Satisfaction Questionnaire Model 24
Figure 4	Relationships of Research Variables Used for Residential Satisfaction Decision Support System 89
Figure 5	Architecture of Multilayered Feedforward Neural Network (MFNN) 100

Figure A.7 Example of List of Figures

SUMMARY

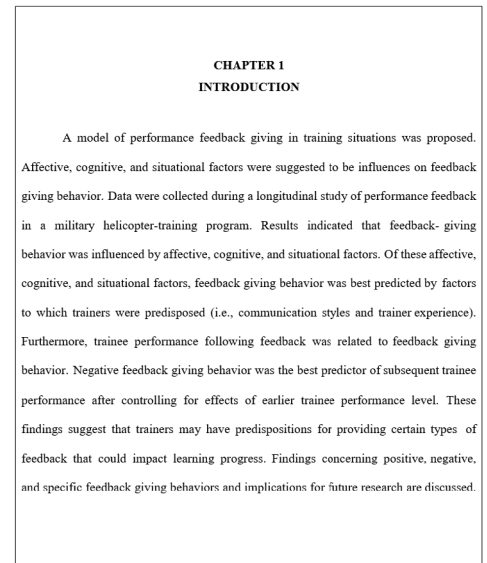
(NOTE: SUMMARY is not the same as ABSTRACT submitted by PhD students)

A model of performance feedback giving in training situations was proposed. Affective, cognitive, and situational factors were suggested to be influences on feedback giving behavior. Data were collected during a longitudinal study of performance feedback in a military helicopter-training program. Results indicated that feedback-giving behavior was influenced by affective, cognitive, and situational factors. Of these affective, cognitive, and situational factors, feedback giving behavior was best predicted by factors to which trainers were predisposed (i.e., communication styles and trainer experience). Furthermore, trainee performance following feedback was related to feedback giving behavior. Negative feedback giving behavior was the best predictor of subsequent trainee performance after controlling for effects of earlier trainee performance level. These findings suggest that trainers may have predispositions for providing certain types of feedback that could impact learning progress. Findings concerning positive, negative, and specific feedback giving behaviors and implications for future research are discussed.

Figure A.8 Example of Summary

Sections and Subsections

Chapters are customarily divided into subsections with subheadings that have slightly differing font styles and are designated first-, second-, and third-level. The first-level subdivision should grab attention more than the lower levels. Centered headings grab attention better than headings beginning at the left. Italic, underlined, or bold-face type grab attention better than plain text. It's also helpful to leave some blank space above and below.



The following is an example of a hierarchy of subheadings:

Figure A.9 Example of a Chapter

1.1 Freedom and Constraint in Early Modernist Residential Plans

1.1.1 Early Modernist Design Freedoms

1.1.1.1 Early Modernist Design Constraints

1.1.1.1.1 How Early Modernists Overcame Design Constraints

Introduction

The introduction contains the author's open remarks about the thesis subject. This section may be entitled "INTRODUCTION" or "CHAPTER 1," according to the format being followed and/or the length of the section. Whether or not it is called "chapter 1," it is equivalent to the first chapter.

- Begin numbering with Arabic numerals, starting with page 1.
- Type "INTRODUCTION" or "CHAPTER 1."
- Leave three blank single-spaced lines (or equivalent) and begin typing text.

6.6 END PAGES

Appendix or Appendices

Not all students will need to include this division. Appendices are usually added to contain data and quotations too lengthy for inclusion in the text. They should not be listed as chapters in the thesis.

- Continue numbering all pages consecutively.
- The appendices may be divided into APPENDIX A, APPENDIX B, etc., depending on the type and amount of material used.
- Each appendix may have its own cover sheet.
 - For each cover sheet type "APPENDIX A," "APPENDIX B," etc., centered at the top of the page.

- Appendix subsections should follow the same style as the chapter subsections (i.e. A.1, A.2, B.1, B.2)
- Leave one blank line and type the title of the material.
- Appendices must meet paper and margin guidelines.
- Each appendix and its title should be listed separately in the table of contents.
- Tables and figures in the appendices must be numbered, captioned, and listed in the list of tables or list of figures.
- All materials used in the appendices must be distinct, legible, of professional quality, and conform to margin guidelines.
- Include letters of permission for use of copyrighted materials in a separate appendix.

References

Any thesis/dissertation that makes use of other works, either in direct quotation or by reference, must contain a reference listing of these sources.

- Type the heading “REFERENCES,” centered at the top of the page.
- You may use LITERATURE CITED or BIBLIOGRAPHY instead of REFERENCES, if that is the convention in your discipline. Whichever you use, use the same terminology in the table of contents.
- Leave three blank lines. Type the list of sources single-spaced within, and double-spaced between entries.
- If you are using the “journal-style” format, references come at the end of each chapter. List the references as a subsection for each chapter (i.e., “3.5 References”).
- All hyperlinks (that will appear in blue automatically with Microsoft Word) must be changed to appear black with no underline. When websites are used as references, the URL, author if known, title if there is one, and the date the URL was accessed by the thesis author should be listed in the references.

REFERENCES

Al-Senan, S. and Wright, P. (1987). Prediction of Head-On Accident Sites. *TRR 112*. TRB, National Research Council, Washington, D.C.

American Association of State Highway and Transportation Officials. (2001). *A Policy on Geometric Design of Highways and Streets*. Washington, D.C.

Benskooh, R.F. (1990). Accident Savings from Roadside Improvements on Two-Lane Rural Highways. *Report No. FHWA/ILRC-009*. Federal Highway Administration. Washington, D.C.

Bali, S. (1978). Cost-Effectiveness and Safety of Alternative Roadway Delineation Treatments of Rural Two-Lane Highways. *Vol. II, Final Report*. Report No. FHWA-RD-78-51. Federal Highway Administration. Washington, D.C.

Boyce, D.E. (1989). Cost-Effective 3R Roadside Safety Policy for Two-Lane Rural Highways. *Report No. FHWA/ILRC-003*. *FHWA/ILRC-003*. Federal Highway Administration. Washington, D.C.

Bresman, Friedman (1984). *Classification and Regression Trees*. Wadsworth International Group, Belmont, CA.

Cleveland, D.E. (1978). Macroscopic Modeling of Two-Lane Rural Roadside Accidents. *TRR 681*. TRB, National Research Council, Washington, D.C.

Council, F.M. (1999). Safety Effects of the Conversion of Rural Two-Lane to Four-Lane Roadways Based on Cross-Sectional Models. *TRR 1666*. TRB, National Research Council, Washington, D.C.

Figure A.10 Example of References

Vita (Ph.D. Only)

Doctoral students may provide a brief (preferably one page) vita including the place of birth, written in the third person. This vita is similar to the author biography found on book jackets.

VITA

George P. Bardell holds a bachelor's degree in Architecture from Georgia Institute of Technology. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Figure A.11 Example of Vita

7. TABLES AND FIGURES

7.1 DEFINITIONS

- The word “table” designates tabulated numerical data used in the body and appendices of the thesis/ dissertation.
- The word “figure” designates all other nonverbal material used in the body and appendices, such as photographs, drawings, diagrams, etc.

7.2 CAPTIONS

- Every table and figure must bear a caption and number. Numbering should be Arabic numerals not Roman numerals.
- Captions are the descriptive titles of tables and figures, and are generally one line. If a caption needs to be more than one line, it should be single-spaced.
- Captions, as they appear on the tables and figures, must be the same as their listing in the list of tables or figures. Long captions may be abbreviated in the list if the identification is not impaired.
- The number of a table and its caption are placed above the top line of the table (“table at top”).
- The number of a figure and its caption is placed below the last line or bottom edge of the figure (“figure at foot”).

7.3 PLACEMENT

- Tables and figures are inserted as near as possible to the text they illustrate. Do not interrupt a paragraph or sentence to insert a figure.
- Tables and figures that are one-half page or less in length may appear on the same page with text. If larger than half-page, they may be centered on their own page.
- Two or more smaller tables or figures may be placed on a single page. Sufficient space should be left between them to make them visually distinct, generally a minimum of three blank lines.
- Independent figures and tables should not be placed side-by-side.
- Text should not be wrapped around figures or tables.
- Three blank lines should be left before and after each figure or table, except if at the very top or bottom of a page, in which case the margin can substitute for the three blank lines.
- Landscape (“on end”) tables and figures: Tables and figures may be in landscape (“on end”) orientation. The same margins and page number position must be maintained, however, as for normal text pages. Furthermore, the captions and legends for rotated tables and figures must have the same orientation as the table or figure. Thus, for a landscape (on end) table, the table should be placed so that the top of the table is nearest the 1.5” (binding side) margin (or the left 11” side). The caption will be above the table, closest to the left/binding edge so that the caption can be read as the table or figure is examined.

Placement Examples

X

Moore's Law has, for nigh half a century, reliably predicted the growth in efficiency of processors: Moore's Law states that the number of transistors that can be placed on a given surface area doubles every two years [1001]. As a consequence, the number of transistors - and consequently, the computing power - of processors has grown exponentially until recently. However, this growth can no longer be sustained due to a combination of several factors. The most important cause are quantum mechanical effects which raise the electrical resistance of the transistors and thus cause heat dissipation problems which result in energy loss [1002].

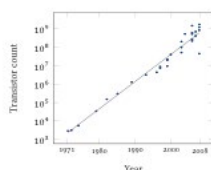


Figure 1: Moore's Law illustrated by the number of transistors of typical processors for each era. Note that the y axis is logarithmic.

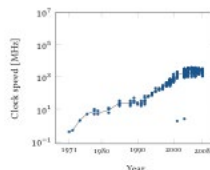


Figure 2: Clock speed (in MHz) of Intel processors over the years and their mean values for each year.

On the other hand, we're dealing with ever increasing amounts of data that our programs have to process. Figure 3 illustrates this using the example of the number of se-

This is where the table goes with text wrapping around it. You may embed tabular environment inside wrappable environment and customize as you like.

X

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna.

Table 1: A wrapped table going nicely inside the text.

Header-1	Header-1	Header-1
2	3	5
2	3	5
2	3	5

Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Table 1 is a wrapped table.

1

✓



Figure 1: Property profile of the diverse library compared to the compound pool.

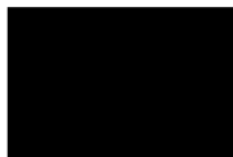


Figure 2: Property profile of the diverse library compared to the compound pool - not rotated.

7.4 NUMBERING

- Tables and figures within the body of the thesis each have a separate series of consecutive numbers.
- The series may run consecutively throughout the work, including the appendices, or the series may restart at each chapter (e.g., Figure 1.2, Figure 2.2), in which case, the figures or tables in the appendices will be numbered A.1, A.2, B.1, etc. Regardless, numbering should be Arabic numerals and not Roman numerals.
- If any table continues to subsequent pages, the caption is not repeated but the top line should read:

Table # (continued)

- If a figure continues to subsequent pages, the full caption should be placed at the foot of the first page of the figure and each subsequent page should carry an abbreviated caption at its foot. For example:

Figure # (continued)

7.5 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. For example:

Figure 10 or Table 1.4.

7.6 PREPARATION

- All tables and figures, including the caption, must meet the same margin, font, and format requirements as the text.
- Tables and figures must be of professional quality.
- If photographs are used, they must be high resolution.
- Diagrams, drawings, figures, etc. must be sufficiently clear, sharp, and large to be easily readable.
- Computer-generated tables and figures must be fully legible.
- Color images may be used.

7.7 MULTIMEDIA FILES IN FIGURES AND TABLES

Authors may include multimedia files in any of the formats given in Chapter 3.

External multimedia files must be linked by a hyperlink to the body of the ETD and must be listed in the list of figures (e.g., multimedia files are most commonly associated with figures).

The author may use a still figure that becomes animated when selected, or may have a mere place holder. In either case, the figure should bear a figure number, a figure title, the name of the multimedia file, and the size of the file. This same information should appear in the list of figures. For example:

Figure 6.3.1: Flow visualization of the subatomic model with a flow split. (student_anna_200412_mast_fig631_flowsplit.mov, 82K)

If there is no still version of the figure, the author will center just the figure title and caption on the page.

8. MULTIVOLUME THESES OR DISSERTATIONS

- Any thesis or dissertation that is thicker than 2.50" when printed must be divided into multiple volumes. Students should take into consideration that cotton rag paper, usually used for theses, is thicker than standard copy paper.
- Each volume should be separated at the end of a major division. The volume I, II, etc., title page (not counted or numbered) is placed at the beginning of each volume and is identical except for the words volume I, volume II, which should be printed just below the title.
- All preliminary pages will remain in volume I.
- In numbering the text and reference pages, numbering is continuous from volume I through all subsequent volumes. For example:

**A Guide to the Preparation of Master's Thesis
and Doctoral Dissertations**

VOLUME I

By Dale Elliott

Although theses and dissertations are submitted electronically, separation into volumes should be used for theses that would be more than 2.5" thick if printed and bound.

9. THE ABSTRACT (DOCTORAL STUDENTS ONLY)

9.1 PURPOSE

The abstract is not a part of the dissertation itself, but the Graduate Education Thesis Office asks you to submit two additional copies for our use.

The abstract is turned in as a document separate from the dissertation and can be printed on regular copy or laser paper. It can be single-spaced or double-spaced but must have at least 1" margins all around. Your abstract should provide a concise descriptive account of your work. It may contain the same text as that of the summary in the preliminary pages of the dissertation, but the format should be as described. Note that you do not use the title "abstract" on the abstract.

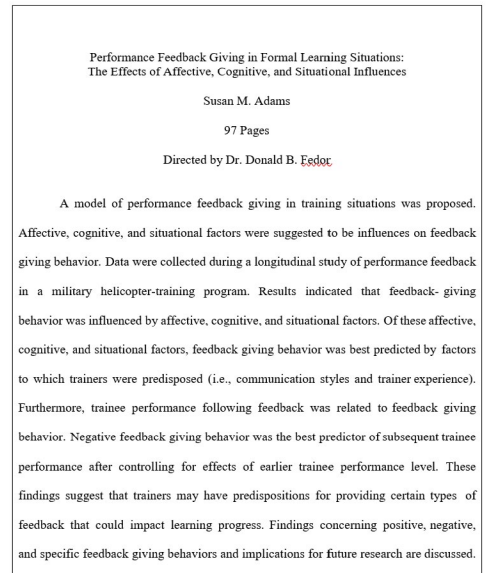


Figure A.12 Example of Abstract (Ph.D. Students Only)

9.2 FORMAT OF THE ABSTRACT

EXAMPLE:

**Title Of Your Dissertation Centered
and Divided Onto Two Lines if Necessary Due to its Length**
[blank line]
Author S. Name
[blank line]
nn Pages
[blank line]
Directed by Dr. You R. Advisor
[one or more blank lines]

Here begins the text of your abstract. Brevity is important, so it is in your interest to do any editing that may be necessary..... End of example.

The number of pages given in the header of the abstract should be the same as last numbered Arabic numeral in your dissertation, usually the page number of your vita or the last page of your references. You do not count the preliminary pages.

Note: Both items are required by the Office of Graduate Education. Please send copies of the abstract, cover page, and SED certificate as a PDF to thesis@grad.gatech.edu.

10. COMMON FORMATTING MISTAKES TO AVOID

The Graduate Education Thesis Office processes a large number of theses and dissertations each semester. Documents are reviewed mainly for consistency, appearance, and adherence to the formatting requirements given in this manual. A single document usually takes about 10 minutes to check, depending on the length and number of errors encountered. Students are encouraged to have the Graduate Education Thesis Office look over the format by the initial format check deadline to allow the student plenty of time to correct any formatting errors and also to obtain any missing documents or signatures before final submission. No initial thesis checking will be done after the initial format deadline has passed. Initial format check deadlines are listed on the [Theses and Dissertation Deadlines website](#).

Below are some of the most common format mistakes along with helpful videos (Word-based) that may help correct those issues.

10.1 TABLE OF CONTENTS FORMATTING ISSUES

We highly encourage students to not use the automatic table generator via Microsoft Word for the table of contents. Many errors can occur when using this tool such as bookmark errors, improper alignment of numbers, and sections missing from the table of content. [Video](#)

10.2 INCORRECT MARGINS AND ORIENTATION

Margin specifications must be met throughout the entire thesis/dissertation, including the preliminary pages, the text, and the reference material, as well as all tables and figures. Tables and figures in a rotated orientation must still be placed on portrait-oriented pages. [Video](#)

10.3 FONTS AND SPACING PROBLEMS

The text must be double-spaced except as described in Chapter 8. The table of contents, lists of figures and tables, and references should all be double-spaced between entries and only single-spaced within entries.

10.4 INCORRECT PAGE NUMBER PLACEMENT

Page numbers must be in the same location and orientation on all numbered pages, including figures and tables. Page numbers are generally centered at the bottom of the page, 1" from the bottom margin. Be sure there are no missing pages.

The cover page, the thesis approval page, the dedication, and volume cover pages do not bear printed page numbers. However, count them in the number of pages. [Video](#)

10.5 FLAWED IMAGE QUALITY

Any figures, tables, or illustrations used in the body of the text must be high-quality. It is the student's responsibility to sharpen and/or clean up images imported from external programs before converting it into a PDF. [Video](#)

APPENDICES

APPENDIX A: WRITING AND FORMATTING RESOURCES

A.1 BOOKS

Kate L. Turabian *A Manual for Writers of Term Papers, Theses and Dissertations (9th Edition)* Chicago: University of Chicago Press, 1996.

The Chicago Manual of Style by University of Chicago Press Staff.

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Allan A. Glatthorn and Randy L. Joyner. *Writing the Winning Thesis or Dissertation: A Step-by-Step Guide* (Paperback) (4th Edition) Thousand Oaks: Corwin, 2018.

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Kjell Erik Rudestam and Rae R. Newton. *Surviving Your Dissertation: A Comprehensive Guide to Content and Process* Thousand Oaks: Sage, 2015.

A.2. WEBSITES

Georgia Tech Communications Center: communicationcenter.gatech.edu

MIT Online Writing and Communication Center: cmsw.mit.edu/writing-and-communication-center/resources

Purdue University OWL Writing Center: owl.english.purdue.edu/

"Writing and Presenting Your Thesis or Dissertation" by S. Joseph Levine, Ph.D. Michigan State University

www.learnerassociates.net/dissthes/

Word for Research Writing II: Figures and Tables https://graduateschool.nd.edu/assets/283522/wfrw_ii_figures_and_tables.pdf

APPENDIX B: LaTeX COMMON ISSUES AND CONCERNS

Forcing Table Captions above Tables tex.stackexchange.com/questions/22751/how-to-force-table-caption-on-top

Inserting Copyright on Cover Page: tex.stackexchange.com/questions/118918/how-to-insert-copyright-line-on-title-page

Figure and Table Placement robjhyndman.com/hyndsight/latex-floats/

[Overleaf Professional](#) (link is external) accounts for all students, faculty, and staff who would like to use the collaborative, online LaTeX editor for their projects.

[LaTeX Template](#) (.zip) updated May 2020

[WordtoLaTeX Help/Software](#) (link is external)

[LaTeX Project](#) (link is external)

[Texmaker 4.5](#) (link is external)

[MiKTeX 2.9](#) (link is external)

FOR MORE INFORMATION

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