



NORTH CAROLINA STATE UNIVERSITY

THE GRADUATE SCHOOL

Electronic **T**hesis & **D**issertation (ETD) Guide

Summer 2011 graduates and after

NCSU Graduate School Guidelines and Requirements
for Master Theses and Doctoral Dissertations

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Disclaimer

In order to keep the ETD Guide short for printing, this guide is NOT formatted in Graduate School format. The content explains, defines, and exemplifies Graduate School required format. Please follow the directions and details provided within. Happy writing!

It's time to move out
when Mom says,



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INTRODUCTION

Rationale for and Relationship of the Thesis and Dissertation Requirement to Research and Publication

This guide for the preparation of electronic theses and dissertations at North Carolina State University (NCSU) is designed to assist graduate students, faculty, and staff in understanding the requirements and suggestions of the Graduate School for theses and dissertations. A written thesis is required for most Master of Art and Master of Science degrees and a written dissertation for all Doctor of Philosophy and Doctor of Education degrees at NCSU. The purpose of the thesis or dissertation is to provide an experience in scholarship which will be of enduring value to the student in understanding how new knowledge is acquired and communicated within his/her chosen field. Thus, the thesis or dissertation should provide tangible evidence of the student's development as a scholar and especially his/her capacity to discover and effectively communicate research findings. The thesis or dissertation should also enlarge the body of knowledge in the student's chosen field.

North Carolina State University is one of two Research I Universities of the sixteen constituent institutions of the University of North Carolina. By virtue of this designation and its long-standing tradition of scholarship and research in agriculture and life sciences, design, education and psychology, engineering, natural resources, humanities and social sciences, management, physical and mathematical sciences, textiles, and veterinary medicine, a major mission of NCSU is the discovery and communication of knowledge. One significant means of achieving this important mission is the education of graduate students.

Preparing thesis or dissertation research directly for publication provides economic and educational advantages both to the student and to the department supporting the research. It is a long standing tradition in many departments at NCSU that the costs of producing a thesis are borne by the student but that the costs of producing manuscripts for publication are usually borne by the department supporting the research. In the interest of increasing their output of scholarly research, many departments are making computer, word processing, photographic, figure drafting and other manuscript preparation equipment and support services available to graduate students. The Graduate School applauds these efforts and encourages departments to develop policies and procedures for the support of research by graduate students which will (1) enhance the educational value of the thesis research experience, (2) increase the quality and quantity of research published by the department and (3) insure that appropriate use is made of whatever resources are available within the department for the support of scholarly research.

History of ETD at NCSU

In spring 1997, the NCSU Libraries, the Graduate School and the Information Technology division collaborated on a pilot project that allowed theses and dissertations to be submitted, approved and accessed electronically. The local effort was part of a larger project sponsored by the Southeastern Universities Research Association (SURA) and prototyped by Virginia

Polytechnic Institute and State University (Virginia Tech) to create a digital thesis and dissertation repository.

The interest in the ETD (Electronic Thesis and Dissertations) Initiative was overwhelming, and beginning fall 2002, the University required electronic submission of all theses and dissertations. Students submit their works to the Graduate School as Portable Document Format (PDF) files. Once reviewed and approved, they are transmitted to the Libraries for cataloging and then can be accessed via the Libraries' Web server.

In 2007, the NCSU University Libraries and the The Graduate School partnered to create a new ETD Submission System to incorporate current technologies after 10 years of utilizing the original ETD Submission System. In spring 2010, the new ETD Submission System went live for summer 2010 graduates. The New ETD Submission System streamlined the submission process for students, incorporated student records for accuracy and increased the communication and archive capabilities for the university.

Benefits of ETDs

ETDs increase the availability of research to the academic community worldwide, increase the exposure to potential employers, improve student understanding of electronic publishing issues and reduce the need for library space. Technical innovations are changing the way we communicate and share information around the globe. ETDs offer a new generation of theses and dissertations that can include color diagrams, color images, hypertext links, audio, video, animations, spreadsheets, databases, simulations, and virtual reality worlds.

In addition to the multimedia aspects discussed above, the ETD will be given an address on the World Wide Web after it is publicly released so it can be accessible worldwide. In this way the ETD can answer other's questions and inspire further research. Through the World Wide Web, people anywhere in the world can link directly to students' ETDs or ETD collections at NC State and other universities. ETD is cost-effective for both student and university.

The student will save time and money by virtually eliminating the paper review by the advisory committees and ETD Editor as well as the high cost of printing multiple high-quality hard copies of the thesis or dissertation. By receiving them electronically, the university is allowed to fulfill its responsibilities of recording and archiving theses and dissertations more economically. This is a key responsibility of the university, which is easier and less costly (in this time of tight budgets) to fulfill when the workflow involves electronic documents.

ETDs help in accelerating workflow within the university and library systems and make theses and dissertations more quickly available to outside audiences.

ETD Accessibility

NC State's ETDs can be accessed via the World Wide Web. People can link directly to students' ETDs or link to NC State's ETD collection at <http://www.lib.ncsu.edu/guides/etds/known-ncsu.html> People searching the NC State library catalog can also find a dissertation by subject and can link directly to an ETD from the search results. Commercial search engines also have access to released ETDs. The thesis or dissertation may truly be accessible to everyone with internet access.

NC State is a member of the Networked Digital Library of Theses and Dissertations (NDLTD), which is at the forefront of the ETD movement. The ETD initiative is aimed at improving graduate education by ensuring that students learn about publication issues and about using digital libraries. At the same time, the ETD initiative is helping to develop an important digital library that ultimately will include millions of full-text or even hypermedial documents. Researchers can search and browse NC State's ETD Collection, as well as the collections of other NDLTD members, on their Web site at <http://www.ndltd.org>

RESPONSIBILITY FOR PREPARATION AND EVALUATION OF THESES AND DISSERTATIONS

Responsibilities and Evaluation

Preparing and evaluating each thesis is the joint responsibility of the graduate student, the graduate advisory committee and the Graduate School ETD Editor. Communication and interaction among all of these participants is the key to producing a thesis or dissertation of the highest possible quality. All theses and dissertations are to be written in English unless the advisory committee obtains explicit permission of the Dean of the Graduate School, certifies the competence to judge the quality of the thesis and demonstrates that a foreign language is more relevant than English for the purpose of the work.

The Graduate Student's Responsibility

The graduate student is responsible for all aspects of the preparation of the thesis or dissertation and publications based on the thesis or dissertation research, including the following:

1. preparation of manuscripts based on the thesis or dissertation research for publication in the scholarly literature of the appropriate field;
2. meeting the deadlines associated with final oral exam, ETD Review, final submission and graduation;
3. submitting the required forms and fee payments;
4. subject matter and content;
5. obtaining the necessary information for organization and approved or required format;

6. editorial, linguistic and bibliographic quality;
7. quality and accuracy of text, illustrations and duplication;
8. quality and accuracy of data, evidence and logical reasoning presented;
9. obtaining the necessary permissions for copyrighted information

The Advisory Committee's Responsibility

The chair/co-chair and, to a lesser extent, the other members of the advisory committee are responsible for the following aspects of the thesis or dissertation and the related or associated research experience:

1. approval of the subject matter and methodology of the thesis or dissertation research;
2. approval of the organization, content and format of the thesis or dissertation;
3. review of and comment on drafts of various sections of the thesis or dissertation, including (a) the quality of data and evidence, (b) logical reasoning (c) the editorial, linguistic and bibliographic quality and (d) accuracy of the information;
4. evaluation of the thesis or dissertation as a basis for certification that the student has fulfilled the requirements of the degree for which he or she is a candidate;
5. encouragement of and advice to the student and review of manuscripts based on the thesis or dissertation research for publication in the scholarly literature of his or her field.
6. Final approval for the university and cataloging.

The ETD Editor's Responsibility

The Graduate School ETD Editor is responsible for the following:

1. providing counsel and advice upon request by students and members of advisory committees about the required NCSU Graduate School format aspects of thesis and dissertation preparation;
2. checking the draft file (at the ETD Review) once for each student and the final file (for Graduate School acceptance) of each thesis or dissertation to insure that it has been prepared in conformity with the requirements prescribed in this ETD Guide.

GENERAL PREPARATION AND ORGANIZATION

Although the Graduate School and the advisory committee are a part of the evaluation process, the ultimate responsibility for all aspects of thesis or dissertation preparation remains with the student. The general organization, specific subdivision of the text and the method of documentation must be determined by the student in consultation with the chair/co-chair and other members of the advisory committee. These matters should be addressed in the early stages of the student's preparation. An early decision is especially vital concerning the style manual to be used as a model or guide in the preparation of the thesis. It may also be helpful for a student to look at other theses or dissertations that have been

prepared in the student's own program area within the last two to three years in order to gain a basic understanding of the best organization and placement of the various components.

Suggested Manuals of Style

The ETD Editor will not check the thesis to verify it is in conformity with the style guide used. The decision of what style guide to use is up to the discipline, the committee and the student. <http://www.lib.ncsu.edu/guides/WritingResources/documentation.html>

The following manuals of style are among those readily available to graduate students and advisory committees in the [D.H. Hill Library](#):

MLA - Purdue Guide	CBE - Bedford / St. Martin's Guide
MLA - Landmark Guide	Chicago Manual of Style
APA - Purdue Guide	Chicago - Bedford / St. Martin's Guide
APA - Landmark Guide	NARA - Citing Records in the National
CBE - Diana Hacker Guide	Archives of the United States

Students are also encouraged to utilize electronic citation management software such as RefWorks (free for NCSU Students, Staff and Faculty) and Endnote only to name two options.

GENERAL INFORMATION

Filing for a Patent

A thesis or dissertation containing disclosures of patentable discoveries may be embargoed (withheld from being viewed by anyone) by the Graduate School before microfilming and/or filing in D. H. Hill Library for a maximum period of one year after final committee approval. The embargo is granted upon the receipt of written request in the ETD Submission System to the ETD Editor, from the student, stating that a patent application is pending. This written request must be submitted before the final copy of the thesis or dissertation is accepted by the Graduate School to insure adequate review of the embargo request. The Dean of the Graduate School is the only person that can approve a 1-year embargo. An embargo for a thesis until a patent application is filed will not prevent a student from graduating on time.

Binding of Personal Copies

Paper copies are not required no will be issued through the Graduate School or Library . Students interested in having personal copies of their thesis or dissertation hard-bound may do so at their own expense by contacting [Wolf Xpress](#) directly. Please visit the Wolf Xpress web site at <http://www.fis.ncsu.edu/ncsubookstores/wolfxpress/> for thesis services.

Additional Suggestions

Students are strongly encouraged to retain a copy of the final version of the thesis or dissertation in the original format (MS Word, LaTeX, etc) for his/her own records and to protect against accidental loss or destruction of the thesis or dissertation. The University will only have the PDF file on record.

In addition, when a thesis or dissertation has been prepared using a word processor or computer, the student is strongly encouraged to make backup copies of those files and store them in several different places. I.e. thumb drive, Google docs, email, CD, etc.

The ETD Editor also recommends keeping one paper copy of the thesis or dissertation that will keep track of all corrections to the file incase the file is corrupted and the student has to start over.

COPYRIGHTING AND MICROFILMING

Copyrights

The Graduate School refers all copyright questions to the experts on campus in the Copyright and Digital Scholarship Center in the Library.

Use of Copyrighted Material

Before students submit doctoral dissertations to the Graduate School, they are advised to obtain permission from the author or publisher to quote any extensive portion from copyrighted materials. Such permission usually is granted on the condition that appropriate acknowledgement is made. Students are responsible for any payment which may be required.

Copyright Ownership and Use

Students are encouraged to become familiar with the S the Copyright and Digital Scholarship Center in D.H. Hill Library. As part of the NCSU Libraries Learning and Research Center for the Digital Age (LRCDA), the Copyright and Digital Scholarship Center supports the university's research, teaching, and service mission by guiding both the Libraries and NC State's faculty, students, and staff in matters relating to the dissemination and use of

knowledge. We strongly encourage and support the role of the research library in the scholarly communication process, including the exercise of full rights under the fair use section of the copyright law.

The NCSU the Copyright and Digital Scholarship Center

- Is staffed by an attorney and scholarly communication specialist;
- Provides guidance to the library staff on fair use and other issues such as database licensing, user privacy, materials on reserve, interlibrary loan and document delivery services;
- Serves as a resource to the NC State community on scholarly communication issues including copyright and fair use as they relate to library collections and services; and
- Provides workshops and presentations on fair use and other scholarly communication topics.

A Copyright Tutorial, FAQs, contact information and other points of reference are available at http://www.lib.ncsu.edu/dspc/rights_retention.html

Copyrighting the Thesis or Dissertation

For general copyright information or questions relating to copyright registration view the website at <http://www.copyright.gov/help/> or call (202) 707-5959. Recorded information is available twenty-four hours a day, seven days a week, and information specialists are on duty from 8:30 a.m. to 5:00 p.m., Monday through Friday except holidays.

The following information is excerpted from the United States Copyright Office Website at <http://www.copyright.gov/>

The use of a copyright notice is no longer required under U. S. law, although it is often beneficial. Because prior law did contain such a requirement, however, the use of notice is still relevant to the copyright status of older works. Notice was required under the 1976 Copyright Act. This requirement was eliminated when the United States adhered to the Berne Convention, effective March 1, 1989. Use of the notice may be important because it informs the public that the work is protected by copyright, identifies the copyright owner, and shows the year of first publication. Furthermore, in the event that a work is infringed, if a proper notice of copyright appears on the published copy or copies to which a defendant in a copyright infringement suit had access, then no weight shall be given to such a defendant's interposition of a defense based on innocent infringement in mitigation of actual or statutory damages, except as provided in section 504(c)(2) of the copyright law. Innocent infringement occurs when the infringer did not realize that the work was protected. The use of the copyright notice is the responsibility of the copyright owner and does not require advance permission from, or registration with, the Copyright Office. ***Form of Notice for Visually Perceptible Copies*** The notice for visually perceptible copies should contain all the following three elements: 1 the symbol ©

(the letter C in a circle), or the word “Copyright,” or the abbreviation “Copr.”; and 2 the year of first publication of the work. In the case of compilations or derivative works incorporating previously published material, the year date of first publication of the compilation or derivative work is sufficient. The year date may be omitted where a pictorial, graphic, or sculptural work, with accompanying textual matter, if any, is reproduced in or on greeting cards, postcards, stationery, jewelry, dolls, toys, or any useful article; and 3 The name of the owner of copyright in the work, or an abbreviation by which the name can be recognized, or a generally known alternative designation of the owner. Example: © 2008 John Doe The “C in a circle” notice is used only on “visually perceptible copies.” Certain kinds of works—for example, musical, dramatic, and literary works—may be fixed not in “copies” Copies of works published before March 1, 1989, that consist primarily of one or more works of the U. S. government should have a notice and the identifying statement.

Copyright Registration

A student desiring to register a copyright for a thesis or dissertation should deal directly with the United States Copyright Office of the Library of Congress (<http://www.copyright.gov>). The following information is excerpted from the [United States Copyright Office](http://www.copyright.gov) Website at <http://www.copyright.gov/>.

In general, copyright registration is a legal formality intended to make a public record of the basic facts of a particular copyright. However, registration is not a condition of copyright protection. Even though registration is not a requirement for protection, the copyright law provides several inducements or advantages to encourage copyright owners to make registration.

Among these advantages are the following:

- Registration establishes a public record of the copyright claim.
- Before an infringement suit may be filed in court, registration is necessary for works of U. S. origin.
- If made before or within five years of publication, registration will establish prima facie evidence in court of the validity of the copyright and of the facts stated in the certificate.
- If registration is made within three months after publication of the work or prior to an infringement of the work, statutory damages and attorney’s fees will be available to the copyright owner in court actions. Otherwise, only an award of actual damages and profits is available to the copyright owner.
- Registration allows the owner of the copyright to record the registration with the U. S. Customs Service for protection against the importation of infringing copies. For additional information, go to the U. S. Customs and Border Protection website at http://www.cbp.gov/xp/cgov/trade/trade_programs/international_agreements/free

[trade/nafta/intellectual_prop_rights_lp.xml](#) Click on “Intellectual Property Rights.” Registration may be made at any time within the life of the copyright. Unlike the law before 1978, when a work has been registered in unpublished form, it is not necessary to make another registration when the work becomes published, although the copyright owner may register the published edition, if desired.

Copyright and Intellectual Property

In this rapidly changing environment for publishing, there is no uniform practice being followed by all publishers. There is a general trend toward more publishers being willing to consider articles and book manuscripts that are connected with ETDs, but differences exist between academic fields and even between journals and publishers within a single field. Also, it is important to bear in mind that the more revisions that have been made to differentiate an article from the chapter in the dissertation or a book from the whole dissertation, the more likely it is that a publisher will be open to considering the work and will be less threatened by its prior publication as an ETD. The safest course to take is to ask publishers about their policies before the student decides whether to request a delay of the release of the ETD so that it will not hinder the ability to publish articles or books derived from the ETD. As for the rules of copyright, including what and how much the student may reproduce from other works as "fair use," the ultimate responsibility for learning the rules lies with the student, whether s/he is publishing research as an ETD, or later, in a revised form as a journal article or book. ProQuest Information and Learning formerly UMI (University Microfilms International). offers the service of checking dissertations that are submitted to it for potential copyright problems, but like all other publishers, ProQuest also asks the author to warrant that the dissertation does not infringe any copyright, or other rights (such as privacy and libel), so that the liability for any such infringement in the end resides with the author, not the publisher. For a fee, ProQuest will also register the copyright with the U.S. Copyright Office – this would provide extra protection to an author whose work is later infringed. The NC State Library website also offers detailed information about copyright . http://www.lib.ncsu.edu/dspc/rights_retention.html

Microfilming Doctoral Dissertations

North Carolina State University requires that all doctoral dissertations be microfilmed by ProQuest. The student is responsible for the charge assessed by ProQuest. *The diploma will not be released and the statement of the award of the degree entered on the student's permanent record will not be made until the required arrangements for microfilming the dissertation have been completed.* Abstracts of the thesis are published in *Dissertation Abstracts International*, a bimonthly journal. Reproductions of a dissertation, either in whole or in part, may be purchased from ProQuest Information and Learning, 300 North Zeeb

Road, Ann Arbor, Michigan, 48106. Publication in this form does not preclude publication in other outlets.

For doctoral dissertations, ProQuest Information and Learning requires the students to certify that any extensive use of copyrighted material in the manuscript has the written permission of the copyright owner. The purpose of this requirement is to "save and hold harmless" ProQuest Information and Learning from damages that may arise from any copyright violations.

DEADLINES

Students are responsible to be aware of all deadlines, procedures and requirements. All Graduate School deadlines are listed on the Graduate School Website, Academic Calendar for all Graduate Students. There are no exceptions to Graduate School Deadlines.

ETD Deadlines

Every Master Thesis and Doctoral student has 3 ETD deadlines to meet:

THREE (3) ETD DEADLINES:

- (1) ETD **Review** Deadline (*A choice of 2 review deadlines to pick from; 1. No Registration Required or 2. Registration Required; See below.*)
- (2) **Final** Error Free ETD Deadline (*For both No Registration Required and Registration Required*)
- (3) **Final** Committee Approval Deadline (*For both No Registration Required and Registration Required*)

CHOICE OF TWO (2) THESIS REVIEW DEADLINES:

There are 2 ETD **Review** Deadlines to choose from. The student is to **choose ONE ETD Review Deadline** for the ETD review.

- (1) *No Registration Required ETD Deadline*
- (2) *Registration Required ETD Deadline*

Deadline Definitions

NO REGISTRATION REQUIRED ETD REVIEW DEADLINE: Date by which a thesis or dissertation student must unconditionally pass the final exam and have an ETD Review in order to avoid registering for the semester s/he is graduating in. Students meeting this deadline will not be allowed to register in the same academic program for any subsequent semester. The final ETD file is due to the ETD Editor by the Final ETD Editorial Approval Deadline and committee approval must be completed by the Final ETD Committee Approval Deadline.

REGISTRATION REQUIRED ETD REVIEW DEADLINE: Date by which a thesis or dissertation student must unconditionally pass the final exam and have an ETD Review while being registered for the semester s/he is graduating in. Students meeting this deadline will not be allowed to register in the same academic program for any subsequent semester. The final file is due to the ETD Editor by the Final ETD Editorial Approval Deadline and committee approval must be completed by the Final ETD Committee Approval deadline.

APPLY TO GRADUATE DEADLINE: Date by which all graduate students must apply to graduate in a given semester. A student must apply to graduate in order to participate in the graduation exercises, have their transcript posted, and receive a diploma. Thesis and dissertation students must have also completed an ETD Review by this deadline; however, their graduation will still be contingent upon approval of the final ETD by the ETD Editor and Committee Approval by the respective deadlines.

Students may apply to graduate in MyPack Portal. Students are advised to apply to graduate when the defense is scheduled, but application can be submitted at any time up until 5:00 p.m. on the Apply to Graduate deadline.

FINAL ERROR FREE DEADLINE (*FOR BOTH REGISTRATION REQUIRED and NO REGISTRATION REQUIRED FINAL ETDS*): Date by which a thesis or dissertation student must submit the final error free ETD to the ETD Editor in order to graduate at the end of the semester. Graduation will still be contingent upon approval of the final ETD by the student's advisory committee before the expiration of the Final ETD Committee Approval Deadline.

FINAL COMMITTEE APPROVAL DEADLINE: Date by which a thesis or dissertation student must submit and have the final ETD approved by the ETD Editor and all members of their advisory committee in order to graduate at the end of the semester.

GRADUATION DATE: The date degrees are conferred. For fall and spring graduations, this is also the date of the graduation exercises (there are no summer exercises -- summer grads may participate in the fall ceremony).

All deadlines are on the [Graduate School Calendar](#) and the [ETD Deadline](#) link.

ETD WORKSHOPS

Two types of ETD Workshops are provided for students, faculty, and staff. 1. Asynchronous electronic online video workshops and 2. In-person workshops. The online videos are available 24-7-365 and in-person is held approximately once a month except during graduation months.

ETD Workshops are conducted by the Graduate School ETD Editor. The workshop is designed to review the information on the ETD Website for clarification. Prior to the

workshop the student should have read the ETD Guide and all information on the ETD Website and come to the workshop with questions prepared.

Workshop Objectives

By the end of the workshop, the student will be able to:

- (1) Find the resources on the ETD Website
- (2) Pinpoint your deadlines for graduation
- (3) Complete the ETD Submission Steps
- (4) Format the file in the Graduate School Required Format
- (5) Submit the *draft file* for the ETD Review and submit the *final error free file* for Graduate School Acceptance

WHEN TO BEGIN THE ETD PROCESS

Master students should begin the ETD process no later than the end of the first year. Doctoral students should begin the ETD process no later then when the prelim exam is passed.

STEP-BY-STEP SUBMISSION PROCESS

The ETD (Electronic Thesis and Dissertation) is similar to its paper predecessor, however, rather than printing a hard copy for submission to the Graduate School, the thesis or dissertation is printed to a Portable Document Format (**PDF**) file for electronic submission to the Graduate School. The submission is done electronically through the [ETD Submission System](#). **PDF** files are suitable for machine archives and can be viewed on the World Wide Web (WWW).

STEP 1: READ... THE ETD GUIDE & ALL INFORMATION ON THE ETD WEBSITE

Read the requirements and policies in the Thesis and Dissertation Guide AND review all information on the ETD website. Review Graduate School specific deadline dates on the [Graduate School Calendar](#) and [Deadline link](#) on the ETD Website.

STEP 2: "ATTEND"...AN ETD WORKSHOP

Attend a Thesis & Dissertation / ETD Workshop either the asynchronous online videos or in-person. ETD Workshop dates, registration and directions can be found on the main ETD webpage at etd.ncsu.edu under the [Workshop Registration](#) link.

STEP 3: WRITE... THE THESIS OR DISSERTATION (ETD)

Write the thesis or dissertation **beginning** in the Graduate School required format. View examples of all Graduate School required and optional sections in the Thesis and Dissertation Guide. ****DO NOT follow another student's work—Use only the current templates and examples from the ETD Website for all Graduate School Required Formatting****

A list of editors for hire is located on the ETD FAQ. The [List of Editors for Hire](#) is a list of faculty and graduate students at NC State University, as well as several professionals, who have expressed interest in proofreading for a fee. The Graduate School does NOT supervise, manage, recommend, or approve these services; we simply provide this list as a courtesy. All arrangements are made between the student and the hired editor. Please remember that it is your responsibility to abide by the student code of conduct at all times. Be sure to inquire about their rates when you contact them.

STEP 4: SCHEDULE...THE FINAL ORAL EXAMINATION (DEFENSE)

Register for the appropriate credits in the semester that the student takes the final oral examination. Schedule the final oral exam. The exam is to be scheduled in conjunction with the advisory committee and the Graduate Services Coordinator. The exam is to be scheduled no less than 2 weeks before the exam date.

The student is to provide each committee member with a full copy of the thesis/dissertation that they are defending, at least two weeks in advance of the scheduled final oral exam date. This gives the committee members time to review the document and prepare for the final oral exam. The entire document begins with the abstract and ends with either the references or appendix—it includes ALL Graduate School required parts. The file that the student is defending is to be the same file that should be sent for the ETD Review --unless the student receives a conditional pass on the defense. Thus, it is routine to fulfill the 24-hour clock requirement.

STEP 5: DEFEND... THE FINAL ORAL EXAM

Take the final oral examination /defense. The committee will complete the exam report determining the final outcome of the final oral exam.

No original signed title page is required by the Graduate School. The student may have as many title pages signed as s/he wishes for personal keepsakes. Many students prefer to include original signed title pages in their bound copies. The Graduate School is 100% electronic and does not designate the type of paper that the title page is printed on. The student should ask the committee if there is a paper preference.

The Exam Report

At the conclusion of the final oral examination, the advisory committee members designate an outcome of the defense (unconditional pass, conditional pass, or fail) and they all will sign the Exam Report. An unconditional pass is required to begin the ETD Review process. The committee chair will return the completed report to the Graduate Services Coordinator. The Graduate Services Coordinator will submit the exam report to the Graduate School within 5 business days of the final oral exam.

Conditional Pass

If a conditional pass is received at the final oral examination, the ETD Review cannot take place until (1.) the conditions have been met (the final oral exam is now evaluated as an unconditional pass). (2.) the Graduate School College Liaison is notified in writing via email of the date the conditions were met. The 24-hour clock does not begin until the student has met the conditions and has an unconditional pass.

24 Hour Clock

The ETD Review is a format review. As such, it should be held within 24-hours (but before the deadline) of unconditionally passing the defense. The 24-hours is the same day or the immediate day after –this includes weekends. Content changes may continue until approval of the final error free file.

If a student receives a conditional pass on the defense, the 24 hour clock will not start until the student has met all conditions.

Reminder- The file that the student defended should be the same file sent for the ETD Review-- unless the student receives a conditional pass on the defense.

Students will not be able to proceed to Step 6 until s/he has an unconditional pass on the defense.

STEP 6: SUBMIT DRAFT ETD IN ETD SYSTEM... FOR ETD REVIEW

The ETD Editor reviews the ETD once for each student. Thus, each student is to submit a PDF ETD file to the ETD Editor two times only. The first ETD submission is for the ETD Review and the second ETD submission is to have the final error free file accepted by the Graduate School.

Reminder- The file that the student defended should be the same file sent for the ETD Review-- unless the student receives a conditional pass on the defense.

Be sure to complete the [ETD Formatting Requirements Checklist \(Appendix A\)](#) before the student converts the files to PDF for the ETD Review.

All ETD file submissions for the ETD Review are only accepted via the [ETD Submission System](#). Emailed files are not accepted and can not be reviewed.

Important Files are always considered to be a draft until the student submits the final error free file via the Final Submission link in the ETD System.

The advisory committee checks the content, the ETD Editor checks Graduate School required format.

Within 24-hours (but before the deadline) of unconditionally passing the final oral exam, the student must submit the required pdf draft file **via the [ETD Submission System](#)** for the ETD Review. **No emailed files are accepted.** All ETD Review submissions should be within 24-hours of the student unconditionally passing the defense (or met conditions). 24-hours is Monday through Sunday, 7-days a week—including weekends.

The ETD Review file requirement is:

PDF file	draft.pdf	Draft thesis/dissertation with all required Graduate School parts and in Graduate School required format
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Embargo (Withholding)

At the time of draft submission, the student will need to determine the availability of the ETD. All ETD files are to be immediately released unless there is a patent pending or a documented publication issue from the publication company. If an embargo (withholding) is needed, the student is to submit the embargo request via the ETD Submission System link with the explanation for the embargo. If there is a publication issue, the student is to provide documentation from the publishing company (stating that the file should not be released at this time) accompanying the embargo request. Once the ETD Editor receives all embargo request information, she will present the embargo request to the Dean of the Graduate School for a decision. Embargos are not for copyright registrations.

If an embargo is approved, the ETD will not appear on the web or in any search until the day the ETD Editor releases the embargo. The student is able to change the date of release up until the point of final submission. The embargo date will be either 3 months or 1 year from the final committee approval.

The current release options are:

1. immediate release to the World Wide Web
2. three-month embargo for patent or propriety issues
3. or a one-year embargo for patent or propriety issues

NOTE: Once an ETD is ACCEPTED it cannot be altered or recalled. This includes Embargoed/Withheld files.

Early Embargo Release

If the student selects an embargo and wishes to release the ETD *prior* to the embargo date expiring, an email from the student must be submitted to the ETD Editor requesting that the ETD be released early.

Embargo Extension

Embargo extensions are not common. If an embargo extension is needed, the student must email the ETD Editor a minimum of 2 weeks PRIOR to the ETD being released from the embargo. The extension request email must state: (1.) the reason that the ETD needs to be extended and (2.) the new proposed embargo date. The Dean of the Graduate School will review the information with the committee chair to make a decision. Embargos past 1-year are not common.

STEP 7: ETD REVIEW CONDUCTED BY ETD EDITOR

Each student will have the opportunity to have one ETD Review. The student will submit a total of 2 ETD Files in total into the ETD Submission System. The first ETD submission is the draft file for the ETD Review. The second ETD submission is the final error free file to be accepted by the Graduate School with all ETD Review corrections made.

The ETD Review is defined as “The date that the ETD Editor receives the complete draft file submitted in the ETD Submission System.” An ETD Review is NOT the date the ETD Editor reviews the file. **The ETD Editor will send required corrections and information within 3-5 business days from draft submission, but the turnaround may take longer during deadline times.**

The ETD Editor will electronically review each student’s draft file once. The ETD Editor will then electronically send corrections on the PDF draft file with a review checklist. The review checklist is a list of steps required from the review until graduation. ETD system date and time stamps all submissions so an accurate record of the ETD submission is recorded.

STEP 8: MAKE CORRECTIONS TO ETD

The student will make any and all the corrections to the ETD. If any ETD Review corrections were not made and must be changed before it can be approved, the Graduate School ETD Editor will send the student and committee chair a notice via the ETD system, in the form of a brief message. Notices are posted in the ETD System and an acknowledgement of a new notice is delivered as e-mail messages to the student’s NCSU email address.

NOTE: ONCE AN ETD IS ACCEPTED, THERE CAN BE NO FURTHER CHANGES TO IT. (Note- Accepted includes released and/ or embargoed) ONCE AN ETD IS RELEASED, WE ARE UNABLE TO RECALL IT, ALTER IT, OR REPLACE IT.**

FOR DOCTORAL CANDIDATES ONLY, before the ETD Editor can review and accept the final ETD, the required forms and microfilm fee payment must be received. Information and forms are located on the ETD Website through the DOCTORAL REQUIRED FORMS link. All forms are electronic and may be submitted to the ETD Editor via email (scan then email).

STEP 9: SUBMIT FINAL ETD FILE TO ETD EDITOR

Once the student has made all of the committee required changes, ETD Review corrections, hired editor corrections, etc, the student will submit the final file (etd.pdf). The final file can only be named **etd.pdf** in all lower-case letters.

When the ETD Editor receives the final file, she will only review the final ETD to make sure ETD Review corrections have been made. The ETD Editor does not re-review the ETD--the ETD Editor will only verify that all ETD Review corrections have been made. If all ETD Review corrections have been made, the ETD Editor will accept the final error free file and the file advances for Committee Approval.

If all ETD Review corrections have not been made, and/or if the ETD Editor sees new errors while checking the ETD Review corrections, the ETD Editor will add a notice in the ETD System. The student will then make the new correction(s), submit another final file for Graduate School acceptance.

STEP 10: COMMITTEE FINAL APPROVAL

Once the ETD Editor has approved the final ETD file, it advances to the ETD Committee for final approval. The entire ETD Committee will review the ETD. Once they accept the final file, it will be sent to the NCSU Library for cataloging.

If any of the committee members deny the final approval of the ETD, they will deny it in the Plan of Work in MyPack Portal with comments in regards to the denial. Communication will be required between the student and the committee. The student will make any corrections required, submit an updated ETD in the ETD System and then notify the committee via the Plan of Work that the updated ETD has been submitted. The committee will review the final file at this time. (Committees denying a final ETD is not common).

Upon acceptance of the thesis or dissertation by the Advisory Committee, the student will receive an automatic e-mail from the ETD System that the final ETD has been approved. The URL for the ETD will be noted on this email unless the ETD is embargoed because of pending patents. The thesis or dissertation will be on the library server and in the online catalog within 48 hours.

STEP 11: GRADUATE!

As long as all transcripts, plans of work, grades, ETD Editor Final Approval and Committee Approval, etc., have been received, the student will be cleared for graduation by the student's Graduate School College Liaison. If the student finishes all steps including acceptance of the final thesis by the committee, the respective liaison may issue the student a letter of completion stating that the student has fulfilled all degree requirements. The request must come from the student in writing. The student may email the request to the liaison (the liaison's email address is provided on the review checklist) and it takes 48 hours for the letter to be prepared.

Jennifer Crumb	COE	Jennifer_Crumb@ncsu.edu ,
Peggy Olive	CALS, COT, CVM, CNR	Peggy_Olive@ncsu.edu
Dare Cook	CED, COM	Dare_Cook@ncsu.edu
Dorothy Thompson	COD, CHASS, PAMS	Dorothy_Thompson@ncsu.edu

BOUND COPIES

There will be no paper copies of a thesis/dissertation issued by the Graduate School. It is the student's responsibility to determine if the committee and the department require a paper copy and to provide it. If bound copies are needed Wolf Xpress can produce them. Contact Wolf Xpress at 515-2131.

ETD PROCESS FLOW CHART

The ETD Flow Chart is provided to give a visual overview of the ETD Process from beginning to graduation.

[ETD Flow Chart – Appendix B](#)

DOCTORAL CANDIDATE REQUIRED FORMS AND FEE

The ETD Editor cannot accept the final error free ETD until each doctoral graduate student submits the required forms and fee. The forms and fee are submitted in order to fulfill graduation requirements. The Graduate School cannot authorize the release of the diploma or the inclusion of the statement of the award of a degree on the permanent record from which transcripts are made until these form and fee have been received. The required forms and fee are on the ETD Website under the Doctoral Required Forms link.

1. Survey of Earned Doctorate (SED) **PhD only**
2. Doctoral Dissertation Agreement Forms **2 pages**
3. Microfilm Fee
4. Doctoral Graduation Attendance Notification (DGAN)
5. Application to Graduate

All of the forms and fee are available online and submitted electronically to the ETD Editor via email.

PRODUCTION REQUIREMENTS

Paper Size

The standard 8 ½ x 11 size paper is to be used because it is suitable for binding and printing.

Margins

Top, bottom and right margins on each page must be 1.0 inch wide. The left margin on each page must be 1.25 inches wide.

All tables, figures, and copies of reprints or manuscripts included in the thesis or dissertation must conform to these margin requirements; the margin requirements also pertain to any appendices. Figures and tables may be rotated landscape and/or shrunk to fit within the required margins. The viewer will be able to enlarge the screen view when viewing the ETD in Adobe Acrobat. Thus, shrinking tables and figures to fit within the margins is encouraged.

Photographic reduction may be necessary for oversized tables, figures or reprints; or a smaller sized font may be used. Either a "justified" or a "ragged-right" type margin is acceptable, but the type of the margin must be consistent throughout the thesis or dissertation.

The student is strongly encouraged to set the correct margins beginning with the very first draft of the thesis or dissertation in order to avoid difficulties in reformatting at a later date.

[Margins Example – Appendix C](#)

Page Numbering

Pages may be numbered in one of these four locations only: (1) upper right hand corner – outside of the one-inch margin from the top and outside of the one-inch margin from the right edge, (2) lower right hand corner – outside of the one-inch margin from the bottom and outside the one-inch margin from the right edge, (3) top center – outside the one-inch margin from the top, and (4) bottom center- outside the one-inch margin from the bottom.

Lower-case Roman numerals are used for numbering the various preliminary pages beginning with the title page, which is understood to be "i" but remains unnumbered. The page directly following the title page will bear the lower-case Roman numeral "ii." This will either be the optional Dedication or required Biography. Roman numerals are used for the Dedication, Biography, Acknowledgments, Table of Contents, List of Tables, List of Figures, List of Symbols, List of Nomenclature, and List of Abbreviations (other lists as included).

Arabic numerals begin with the first page of the main body of the thesis or dissertation, which is understood to be "1" although traditionally no number appears on that page. Every page in the main body of the thesis or dissertation carries a page number, and the numbering is consecutive throughout the thesis or dissertation to the end, including any appendices. There is to be no punctuation with the numbers.

Wherever the page numbers are located, they must be consistent in location, whether they are Roman numerals or Arabic. There must be at least 2 double-spaces in-between the page number and the text on the page so the page number does not appear to be part of the text. When the page numbering occurs at the top of the paper, the text, headings and so forth begin two double spaces (four lines) beneath the page number. When the page numbering occurs at the bottom of the paper, the text stops at least two double spaces (four lines) above the page number. Use the provided templates or the ETD FAQ to format the page #s to meet both requirements.

[Page Numbers Example – Appendix D](#)

Landscape Pages

For any pages that have landscape text/tables/figures, the student must physically rotate the page to landscape orientation. When the page is rotated, the page number should automatically rotate to the new location. If the page number does not automatically rotate, the student will need to manually rotate the page number location. Step-by-step instructions are on the ETD Frequently Asked Questions (FAQ) on the ETD website. This includes how to manually rotate the page and to manually rotate the page number.

[CORRECT ETD Landscape page Example for ETD Submission – Appendix E](#)

[INCORRECT ETD Landscape page Example \(OK for paper binding\) – Appendix F](#)

Spacing

Text spacing is to be consistent for the entire document. The text should be either double-spaced or space-and-a-half. Certain sections, however, may be single-spaced depending on style guide, including

- long quotations;
- table and figure captions, descriptions and footnotes;
- list of references, literature cited, bibliography, etc. While these reference lists may be single-spaced, a double space should be added between each reference;
- computer printouts.

Font or Type Face

Use one size and type consistently. Changes in font style or type face are not permitted except for inclusion of illustrative or documentary materials such as computer printouts. Usually size 10 or 12 is acceptable but the student can use smaller type for tables, figures, and items included in appendices if necessary to fit margins. The student may also use larger type for headers, title page, etc.

For each preliminary page header, each header must be identical in font size, type face, location, bold, all caps, amount of space in-between the page header and first line of text, etc. Pick one style and make all of the preliminary page headers consistent.

Including Published Work

If a chapter has already been published, the student does not have to reformat the chapter. The student may have chapters that have been formatted in different ways—perhaps they were published in different journals. For instance, one chapter may be in columns and others not, etc.

However, for published chapters, the work still has 2 requirements:

- 1) shrink the pages to fit in our required margins (if needed)
- 2) add the appropriate page numbers (sequence and location). the old page numbers do not need to be deleted --just add new numbers for consistency)

Each reprint or manuscript should include the following information:

- 1) the chapter number (if applicable);
- 2) the title and authorship of the reprint or manuscript;
- 3) the name of the journal or book in which the reprint appeared or to which the manuscript has been published.

Tables and Figures

Many theses and dissertations include tables and figures either in the text and/or in the appendices or both. Since the specific purposes and organization of tables and figures may vary widely among the various disciplines, the student should consult the style manual recommended by the advisory committee or the scholarly journals and books in his/her field for guidance in design and organization.

Numbering

Each table and each figure must bear an identifying number. Tables and figures are numbered in **separate** series. Each table and figure, including any in appendices, must bear a number in its own series. When the decimal system is used, each series may be numbered consecutively within each section or chapter of the thesis. Each table and figure must bear a caption, which may consist of a descriptive title or a descriptive title plus explanatory notes. These captions may be single-spaced.

Placement of Tables and Figures

The placement of tables and figures in a thesis or dissertation may be handled in one of the following ways: each table or figure may be inserted in the text as near as practical following the first reference to it in the text; tables and figures may be grouped at the end of each chapter or manuscript; tables and figures may be grouped at the end of the thesis or dissertation.

Tables and figures may appear on the same page with the text, separated from the text, above and below, by triple spacing or together on the same page. Two or more tables and/or figures may be grouped together on a single page, provided that they fall within the required margins.

Tables Continued

The term "Table" is used to designate tabulated data; this includes computer printout sheets. The number and caption for each table must be placed above the top line of the table. If any table continues to a following page, the line above the table as it continues on the subsequent page should read "Table 16 (continued)" without repeating the caption.

[Tables Continued Example – Appendix G](#)

Figures Continued

The term "Figure" is used to designate photographs, half-tone prints, charts, maps, graphs, plates, drawings, diagrams and other mainly nonverbal material. The number and caption for each figure must be placed below the figure. If the caption is too long to be placed below the figure, or the figure spans more than one page, it must be formatted as a figure continued. For a figure continued, the figure caption is centered on its own page, preceding the figure and the figure continues with no additional text added.

[Figures Continued Example – Appendix H](#)

Floating Headers

A floating header occurs when a new section begins at the bottom of the page. To correct this error, there are two correction options: bump the header to the next page or bring at least two lines of text up beneath the header.

[Floating Header Example– Appendix I](#)

REQUIRED AND OPTIONAL SECTIONS OF A THESIS OR DISSERTATION

Order of Thesis / Dissertation

Generally, a thesis or dissertation consists of four major parts: the abstract, the preliminaries, the text and the reference materials. Some theses and dissertations also include appendices. Table 1 contains a list of all of the required and optional sections and the order of placement within the body of the thesis or dissertation.

Table 1. Thesis/Dissertation Required & Optional Sections and Required Order

Part of Thesis / Dissertation & Order	Required or Optional	Page numbering
Abstract	Required	No page number
Copyright page	Optional *(recommended)	No page number
Title page (unsigned)	Required	Page number does not show ~ is understood to be page i.
Dedication	Optional	lower-case Roman numeral, beginning with ii
Biography	Required	
Acknowledgments	Optional	
Table of Contents	Required	
List of Tables	Required	
List of Figures	Required	
List of Symbols or Abbreviations	Optional	
Text	Required	
References	Required	
Appendices	Optional	

The parts to be included in any given thesis or dissertation should be determined by the style guide and mutual agreement between the student and his/her advisory committee. Each required and optional sections of the thesis or dissertation are described briefly below.

Abstract (Required)

The abstract's purpose is to present the most important findings and methods of the thesis or dissertation research, thus providing a basis for readers to determine their interest in reading the full text. For these reasons it is important that the abstract be as explicit as possible about major findings and methods used. The abstract is the first page of a thesis or dissertation and is limited to 600 words maximum.

The abstract is to be formatted EXACTLY as shown on the Abstract example in the appendix. NOTE ~ The name of the author must be typed as it appears on the student record in the Office of Registration and Records. Contact Registration and Records if a name change needs to be made.

[Abstract Example– Appendix J](#)

Copyright Page (Optional)

The following information is found on the United States Copyright Office Website at [U.S. Copyright Office](#). The use of a copyright notice is no longer required under U. S. law, although it is often beneficial. Use of the notice may be important because it informs the public that the work is protected by copyright, identifies the copyright owner, and shows the year of first publication. Furthermore, in the event that a work is infringed, if a proper notice of copyright appears on the published copy or copies to which a defendant in a copyright infringement suit had access, then no weight shall be given to such a defendant's interposition of a defense based on innocent infringement in mitigation of actual or statutory damages, except as provided in section 504(c)(2) of the copyright law.

If a thesis or dissertation is to be copyrighted, the student should include in each copy, preceding the title page, an unnumbered page bearing (1) the symbol " © " or the word "Copyright" or the abbreviation "Copr.;" (2) the year of first publication; and (3) the full name of the owner of the copyright. An example would be " 2010 Erica Braman Cutchins." A copyright registration is effective on the date that the required application, fee and one complete copy of the entire work for which registration is being made are received in the U. S. Copyright Office.

[Example Copyright Page - Appendix K](#)

Title Page (Required)

In choosing a title, the author should try to include key words that accurately identify the unique or special aspects of the study and that distinguish it from other work; therefore, the use of such expressions as "A Study of" should be avoided. Clear titling is especially important for indexing and informational purposes. The title submitted on the final copies of

the thesis or dissertation does not have to match the title submitted on the student's Plan of Graduate Work.

Note Thesis is for Master and Dissertation is for Doctoral There are separate title pages for Master and Doctoral Students.

The title page is to be formatted EXACTLY as shown on title page example in the appendix. It is highly recommended that students use the template. The title page is the second page of a thesis or dissertation. There is no page number on the title page. The title page is understood to be page i, but it does not show. The title on the abstract matches the title on the title page exactly. However, there is no period after the title on the title page.

The title page in the actual ETD file must not have signatures. The final error free file will not contain any signatures as the Microfilming Company and The Graduate School no longer permit signatures to be posted on the World Wide Web. The student may wish to have title pages signed at the defense to insert original signed title pages into bound copies

The individual members of the advisory committee must be indicated by the typed names beneath the individual signature lines on the title page. The committee chair or and/or co-chairs should be identified by adding "Chair of Advisory Committee" or "Co-chair of Advisory Committee" beneath the name under the signature line(s). The order of the committee names is not designated by the Graduate School. The student is to check with the committee member to determine name order and name spelling.

[Master Title Page Example– Appendix L](#)

[Doctoral Title Page Example– Appendix M](#)

Dedication (Optional), Biography (Required) AND Acknowledgements (Optional)

These sections are personal to the student and may contain any appropriate information which the student may wish to share with the reader. There are no length requirements or limitations. All information in these sections will not be able to be edited, removed, blacked out; etc after the final file is accepted by the Graduate School. Be positive that the information listed is OK to share with the world. These sections may include pictures, quotes, poems, etc. and the student can be as creative as they wish to be.

Dedication (Optional)

The dedication is to be formatted EXACTLY as shown on the dedication example in the appendix. Use the template provided on the ETD Website. The Dedication thanks one person or a small group of people that had the greatest influence on the completion of this work. It is the person or persons the thesis/dissertation is dedicated to. If included, it will be the first page in the document with a page number. The page number will be lower-case Roman

numeral ii. The dedication is the only place where there can be foreign language. If there is foreign language, there must be an English translation located on the page.

[Dedication Example– Appendix N](#)

Biography (Required)

The biography is to be formatted EXACTLY as shown on the biography example in the appendix. Use the template provided on the ETD Website. The biography should contain appropriate professional, academic and personal information about the student. Please note that this information is readily available around the globe via the World Wide Web. Be cautious with the decision of what personal information to include. If the ETD does not contain a dedication, the biography will be the first page with a page number. Otherwise the biography has a lower-case Roman numeral page number following the page number preceding it.

[Biography Example– Appendix O](#)

Acknowledgements (Optional)

The acknowledgments are to be formatted EXACTLY as shown on the acknowledgments example in the appendix. Use the template provided on the ETD Website. The Acknowledgements is where the student thanks everyone and anyone that had an influence on the completion of the graduate degree. It is also where grant funding is listed. Acknowledgments have a lower-case Roman numeral page number following the page number preceding it.

[Acknowledgements Example– Appendix P](#)

Table of Contents (Required)

The Table of Contents is to be formatted EXACTLY as shown on the Table of Contents example in the appendix with the exception of style guide organization. The style guide used will determine the organization of headings and the levels of headings provided. The Table of Contents is a topic outline of the thesis. It will list everything that appears after the Table of Contents. The Table of Contents does not list itself or anything that precedes it. The first entries will normally be the List of Tables and/or the List of Figures. All of the headings and subheadings are listed exactly as they appear in the body of the thesis. The Table of Contents is part of the preliminary section and the page number will be lower-case Roman numerals following the page number preceding it. It will include a bibliography or references and the appendices if they are included in the work.

[Table of Contents Example– Appendix Q](#)

List of Tables (Required) and List of Figures (Required)

The List of Tables and List of Figures are to be formatted EXACTLY as shown on the List of Tables and List of Figures examples in the appendix with the exception of style guide organization. If there are one or more tables and/or figures in the ETD, a list of tables and/or a list of figures are required. Each list will begin on a separate page. Any tables and figures appearing in the appendix must be included in the appropriate list. The listing for List of Tables and List of Figures will be the first two listings in the table of contents. Each table and figure must be numbered and have captions identical with those in the text. Only the captions, not the explanatory notes, will be included. These lists are part of the prelim section and the page number will be lower-case Roman numerals following the page number preceding it.

[List of Tables Example– Appendix R](#)

[List of Figures Example– Appendix S](#)

List of Symbols, Abbreviations or Nomenclature (Optional)

When many abbreviations and/or symbols are used, a separate List of Symbols, List of Abbreviations or Nomenclature with appropriate definitions should be included for the sake of clarity. Such lists should be included following the List of Tables and List of Figures. When abbreviations or other symbols are used, they should be uniform throughout the thesis or dissertation and consistent with the recommendations of the style manual, journal or book which is used as a model in preparing the thesis or dissertation. It is not required to have these lists. Each list will begin on a separate page. These lists are part of the prelim section and the page number will be lower-case Roman numerals following the page number preceding it.

Text (Required)

Immediately following the preliminary pages, the body of work will begin. It may be with the introduction, preface or chapter 1. Whatever it is, the page number will be 1, Arabic.

The organization and format of the text should be appropriate to the nature and scope of the research reported. Generally, the text includes an introduction or preface and occasionally both, a clear statement of objectives, an appropriate review of previous research, a description of the materials and methods used in the thesis or dissertation research, a record of results obtained, interpretive discussion of results in the light of other research, and a summary of the significant findings of the study. Recommendations for future research should be included.

For theses and dissertations of great complexity involving extensive cross referencing and multiple subheadings, a decimal type of organization is suggested. If the decimal system is

used for major and minor divisions of the thesis, it must also be used throughout the entire thesis or dissertation, including the list of references and the appendices. It must also be used for numbering equations, tables and figures. Once a suitable system of subdivision is selected, it should be followed consistently throughout the thesis; combinations of the decimal and the conventional or non-decimal systems are not acceptable. (See examples in Table of Contents and List of Tables sections.)

List of References, Literature Cited or Bibliography (Required)

The thesis or dissertation should contain appropriate documentation--that is, references to original literature relevant to the research presented in the thesis or dissertation. In the humanities and the social sciences, this documentation is achieved through footnotes or endnotes which, in most instances, refer to what is called a bibliography; in the sciences, engineering and technology, documentation in the text may be by author's name or by number and refers to a list of what are called literature citations.

The list of references is required to be listed in the table of contents. The location of the list of references may be done at the end of each chapter or at the end of the work. The location must be consistent throughout the document. The format depends on the style guide used. Possible formats include: listed alphabetically, listed in sequential order as they appear in the text, required to be in the format of the style guide the student is using. The Graduate School requires that there be a double-space in-between each reference listing.

[References Example– Appendix T](#)

Appendix / Appendices (Optional)

The appendix should be used for whatever material the student or the advisory committee believes should be included but would not be appropriate in the text of the thesis or dissertation. Such materials can include: the original data obtained in the thesis or dissertation research, including computer programs and printouts, surveys, correspondence and so forth; detailed outlines of procedures which go beyond the general descriptions of method and approach presented in the text of the thesis or dissertation; a particularly extensive review of literature and other information that may be useful to future scholars who may wish to delve more deeply into the thesis or dissertation research topic.

If an appendix is included in the ETD, then the appendix introduction page is required. The appendix introduction page is to be formatted EXACTLY as shown on the appendix introduction page example in the appendix with exception of the page number location. The page number follows in sequential order from the references and is in consistent location with the document's page number location.

[Appendix Introduction Page Example– Appendix U](#)

APPENDIX

Appendix A – ETD Formatting Requirements Checklist

ABSTRACT (*required*) ABSTRACT is the 1st page of the ETD.

- All text on the page is within the required margins.
- No bold text.
- No page #.
- Has maximum 600 words or less.
- Has a double-space between ABSTRACT (first header) at top of page and the Secondary header (beginning with name).
- Secondary header is single-spaced.
- Secondary header is left-justified.
- Name is all caps in this order - last name, first name middle name (*as on file with Registration and Records. No nicknames*)
- Period after name.
- Title has the first letter of all important words capitalized. (Entire title is NOT all caps)
- Period after title.
- Title on abstract is identical to the title on the title page.
- Sentence in () is worded exactly as required. View example in guide.
- Period at the end of the sentence in the ().
- There is a double-space between secondary header and the text of the abstract.
- Text spacing of abstract text is consistent with text spacing of document (double-space or space and a half).

TITLE PAGE (*required*)

- TITLE PAGE is the 2nd page required page.
- All text on the page is within the required margins.
- No bold text.
- All text on the page is the same size, font, and format.
- No page #. (is considered page i of the prelim pages, but does not show)
- Used master title page for master degree.
- Used doctoral title page for doctoral degree.
- Title is identical to the title on the abstract page.
- No period after the title.
- All text is centered on the page.
- Title has the first letter of all important words capitalized. (Entire title is NOT all caps)
- Title is in an inverted pyramid if it is not contained on one line.
- Title is single-spaced if it is not contained on one line.
- Appropriate spacing between each requirement per examples in the ETD Guide.
- The word by and the student's name lines are single-spaced.
- The word by on the line above the student's name is a lower-case b with no punctuation.

- Name listed is the same name on file with Registration and Records.
- Name is not in all caps.
- Use master paragraph for master degree.
- Use doctoral paragraph for doctoral degree.
- Paragraph is single-spaced and formatted exactly like example in guide.
- List Degree program (do not list the department).
- Degree program is not in all caps.
- Degree program does NOT include “department of”
- Date degree conferred is the year of graduation—the year degree is conferred.
- APPROVED BY: is to be all caps with the : at the end. (*this is the only text that is all caps*)
- Three signature lines for master degree. Unless committee has more members.
- Four signature lines for doctoral degree. Unless committee has more members.
- The names of the committee members are typed under each signature line.
- The order of the committee member names are designated by the committee.
- The committee chair and/or co-chair are identified.
- Doctoral degree, the graduate school representative is not listed on the title page.
- Only NCSU approved NCSU committee members listed on the title page.
- Title page in the ETD document should NOT have signatures.

DEDICATION (*optional*)

- DEDICATION is the 3rd page.
- All text on the page is within the required margins.
- DEDICATION header at the top of the page.
- All prelim page headers are formatted consistently. (ex all caps, bold, and centered)
- Double-space in-between the DEDICATION header and text.
- Is the first page with page #. Page # ii. Prelim pages numbered with lower-case Roman numerals.
- Text spacing is consistent with document text spacing. (Double-space or space-and-a-half).
- This is the only place that can have foreign language. If foreign language is included, the English translation is required on the page.
- Page # outside of the one inch margin of the page.
- Page # are 2 double-spaces from the text on the page.

BIOGRAPHY (*required*)

- BIOGRAPHY is the 4th page if a dedication is included, page # iii.
- BIOGRAPHY is the 3rd page if a dedication is NOT included, page # ii.
- All text on the page is within the required margins.
- BIOGRAPHY header is at the top of the page.
- All prelim page headers are formatted consistently. (ex all caps, bold, and centered)
- All prelim page headers are formatted consistently. (ex all caps, bold, and centered)
- Double-space in-between the BIOGRAPHY header and text. Text spacing is consistent with document text spacing. (double-space or space-and-a-

- half).
- Page # outside of the one inch margin of the page.
- Page # are 2 double-spaces from the text on the page.

ACKNOWLEDGEMENTS *(optional)*

- ACKNOWLEDGEMENTS is a prelim page with the lower-case Roman numeral page # in sequential order.
- All text on the page is within the required margins.
- ACKNOWLEDGEMENTS header is at the top of the page.
- All prelim page headers are formatted consistently. (ex all caps, bold, and centered)
- Header is plural.
- Double-space in-between the ACKNOWLEDGEMENTS header and text.
- Text spacing is consistent with document text spacing. (Double-space or space-and-a-half).
- Page # outside of the one inch margin of the page.
- Page # are 2 double-spaces from the text on the page.

TABLE OF CONTENTS *(required)*

- TABLE OF CONTENTS is a prelim page with the lower-case Roman numeral page # in sequential order.
- All text on the page is within the required margins.
- TABLE OF CONTENTS header is at the top of the page.
- All prelim page headers are formatted consistently. (ex all caps, bold, and centered)
- Header is plural.
- Double-space in-between the TABLE OF CONTENTS header and text.
- First two listings are List of Tables and List of Figures if tables and figures are in the Document unless there are no tables or figures.
- The page #s for the prelim page listings are lower-case Roman numerals.
- TABLE OF CONTENTS should not list anything that precedes it nor list itself
- The listings must be identical to the headers in the document.
- Includes the bibliography / references listing(s).
- Includes a listing for the appendix / appendices if once is included in the document.
- Includes a line or connecting periods from each listing to page #.
- The line or connecting periods ends in a straight line.
- All page #'s in an exact straight line.
- One page # is listed for each listing.
- Page # outside of the one inch margin of the page.
- Page # are 2 double-spaces from the text on the page.

LIST OF TABLES *(required)*

- LIST OF TABLES begins on separate page.
- LIST OF TABLES is a prelim page with the lower-case Roman numeral page # in sequential order.

- All text on the page is within the required margins.
- LIST OF TABLES header is at the top of the page.
- All prelim page headers are formatted consistently. (ex all caps, bold, and centered)
- Header is plural.
- Double-space in-between the LIST OF TABLES header and text.
- Each listing must have the word table, a number and a caption.
- The listings/captions must be identical to the headers in the document.
- Includes a line or connecting periods from text to page #.
- The line or connecting periods ends in a straight line.
- All page #'s in an exact straight line.
- Page # outside of the one inch margin of the page.
- Page # are 2 double-spaces from the text on the page.

LIST OF FIGURES *(required)*

- LIST OF FIGURES begins on separate page.
- LIST OF FIGURES is a prelim page with the lower-case Roman numeral page # in sequential order.
- All text on the page is within the required margins.
- LIST OF FIGURES header is at the top of the page.
- All prelim page headers are formatted consistently. (ex all caps, bold, and centered)
- Header is plural.
- Double-space in-between the LIST OF FIGURES header and text.
- Each listing must have the word figure, a number and a caption.
- The listings/captions must be identical to the headers in the document.
- Includes a line or connecting periods from text to page #.
- The line or connecting periods ends in a straight line.
- All page #'s in an exact straight line.
- Page # outside of the one inch margin of the page.
- Page # are 2 double-spaces from the text on the page.

LIST OF SYMBOLS, ABBREVIATIONS, NOMENCLATURE *(optional)*

- LIST OF SYMBOLS, ABBREV., NOMENCLATURE each list begins on separate page.
- LIST OF SYMBOLS, ABBREV., NOMENCLATURE is a prelim page with the lower-case Roman numeral page # in sequential order.
- All text on the page is within the required margins.
- LIST OF SYMBOLS, ABBREV., NOMENCLATURE header is at the top of the page.
- All prelim page headers are formatted consistently. (ex all caps, bold, and centered)
- Header is plural.
- Double-space in-between the LIST OF **** header and text.

- The listings/captions must be identical to the headers in the document.
- Includes a line or connecting periods from text to page #. If page #'s listed.
- The line or connecting periods ends in a straight line. If page #'s listed.
- All page #'s in an exact straight line. If page #'s listed.
- Page # outside the one inch margin of the page.
- Page # at 2 double-spaces from the text on the page.

MAIN BODY *(required)*

- MAIN BODY begins with Arabic page # 1.
- Page # shows on each page unless style-guide deems otherwise.
- All page # locations consistent throughout the entire document. (both prelim and main body)
- All page # locations consistent with page # location of prelim page #'s.
- All text on the page is within the required margins.
- Page # outside of the one inch margin of the page.
- Page # are 2 double-spaces from the text on the page.
- All table #'s and captions above the tables.
- All figure #'s and captions below the figures.
- All tables that don't fit onto one page are formatted as tables continued. See Ex in guide.
- All figures that don't fit onto one page are formatted as figures continued. See Ex in guide.
- All tables within required page margins.
- All figures within required page margins.
- All text spacing and size is consistent unless a quote, captions, etc.
- Pages rotated landscape, the page # rotated to the proper location.
- No floating headers. (Sections beginning on the last line of a page).
- All headers are consistent: location, font, size, style, etc.

REFERENCES, LITERATURE CITED OR BIBLIOGRAPHY *(required)*

- All text on the page is within the required margins.
- REFERENCES, LITERATURE CITED OR BIBLIOGRAPHY header is at the top of the page.
- If named references, the header is plural.
- Double-space in-between the header and text.
- A double-space in-between each reference listing. The listings themselves do not have to be double-spaced. Follow your style-guide.
- Page # outside of the one inch margin of the page.
- Page # are 2 double-spaces from the text on the page.
- The required listing is in the Table of Contents with respective page #.
- Location is consistent in document: at the end of each chapter or at the end of the ETD only.

- Format follows style guide and is consistent. E.g. listed alphabetically, sequential order, etc.

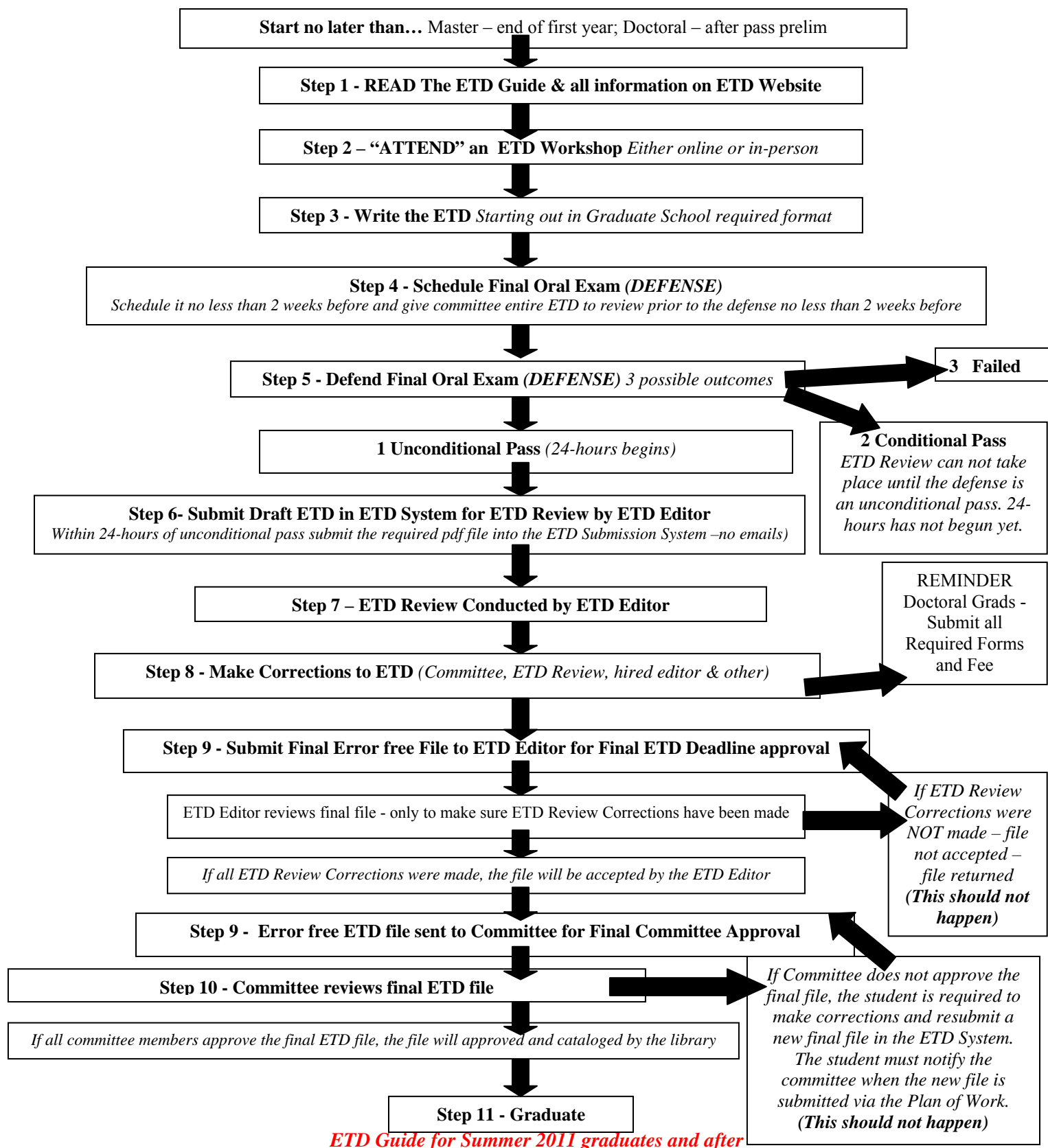
APPENDIX / APPENDICES (*optional*)

- Appendix introduction page included. See EX in guide.
- All text on the page is within the required margins.
- APPENDIX OR APPENDICES –you chose what it is named.
- Page # outside of the one inch margin of the page.
- Page # are 2 double-spaces from the text on the page.
- All pages numbered in sequential order with document. (Doesn't start over with page 1).

OTHER (*required*)

- No blank pages.
- All page #'s in same location and are same size.
- All text on the page is within the required margins.
- Previously published work must include the page # for the thesis/dissertation and be contained with the margins.
- No punctuation with page #'s.
- No page #'s on left side of page.
- Prelim page #'s lower-case Roman numerals.
- Page # outside of the one inch margin of the page.
- Page # are 2 double-spaces from the text on the page.
- Landscape pages rotated landscape.
- Landscape pages have page # in proper location.
- Spacing is consistent: double-space or space-and-a-half.
- One font and type face used consistently, except for headers, captions, etc.
- Tables and figures in consistent location for entire document: embedded in text, at end of each chapter, at the end of the document.
- All page #'s listed in Table of Contents, List of Tables, List of Figures, etc, are properly listed.

Appendix B– ETD Flow Chart



Appendix C – Margin Formatting Requirements

Margins

Left 1.25 inches

Right 1inch

Top 1inch

Bottom 1inch

** Nothing is to be inside the margins*

LEFT
1.25"

RIGHT
1"

BOTTOM
1"

Appendix D– *Page Number Formatting Requirements*

* Examples of page # locations in green

- 1) The page # must be outside of the one inch margin
- 2) There must be 2 double spaces in-between the text and the page # (*This sets the page # apart from the text*)
- 3) No punctuation, just the page number
(*i.e. 1., -1-, page 1, .1. 1,*)
- 4) No page #'s permitted on left side of page



Table 2 This page is format is incorrect for Electronic Thesis and Dissertation submission. This format is ok for binding. However for ETD submission, the page needs to be properly rotated. All text must go in consistent direction and the page # properly rotated. ETD FAQ PROVIDES STEP-BY-STEP INSTRUCTIONS ON HOW TO PROPERLY FORMAT.

Row 1	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Row 2	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
Row 3	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
Row 4	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
Row 5	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA
Row 6	DATA	DATA	DATA	DATA	DATA	DATA	DATA	DATA

Appendix G – *Tables Continued Example*

22

Table 1 Caption is above the table

23

Table 1 Continued

24

Table 1 Continued

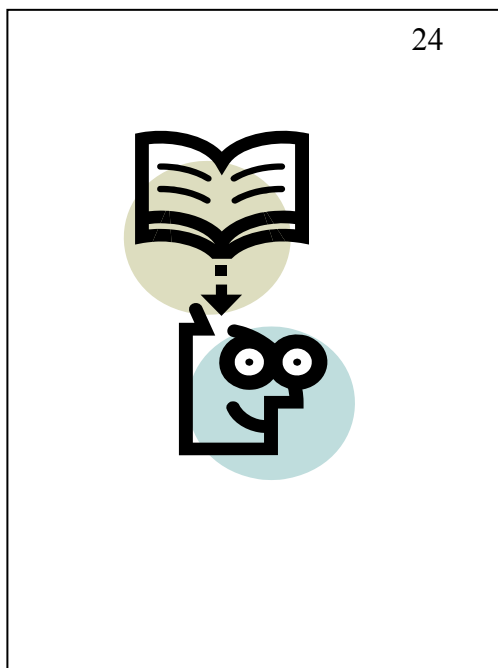
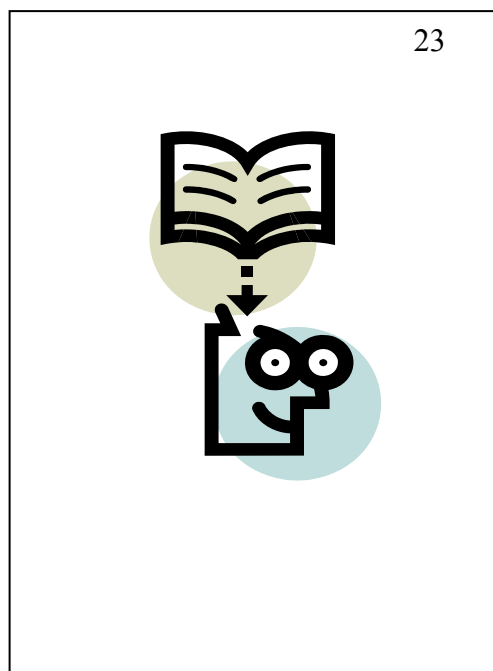
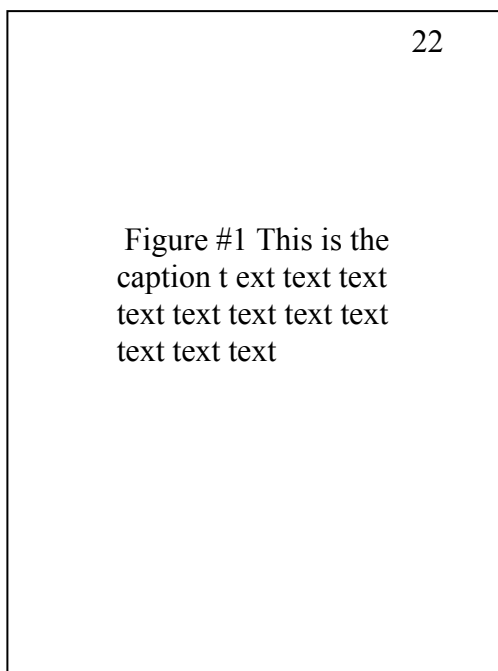
Then the text resumes and continues on to complete the section.

Table #s and captions are above the table.

However, for a table continued, where a table does not fit onto one page, the entire caption shows on the first page only.

On the continuing pages only the word table, the table # and the word continued is on all of the continuing pages.

Appendix H– *Figures Continued Example*



Normally a figure # and caption is below the figure.

However, for a figure continued, where a figure does not fit onto one page, the figure # and caption are centered on its own page preceding the figure.

Then the figure continues on the following pages with NO additional edits (text) on the continuing pages.

Appendix I – *Floating Header Example*

The concept of linear function is a major concept in first year algebra and represents the first formal example of function student’s most likely encounter. Knuth (2000a) contended that the study of linear functions sets the stage for more advanced work in school mathematics. Constructs of linear functions that seem of essence are “slope”, “y-intercept” (Moschkovich, 1996, 1998, 1999) and relation between dependent and independent variables. These ideas stem in part from the coordinated images of two independently varying linear quantities, “**x**” and “**y**” (Carlson, 1998, 2002), (where **x** and **y** co-vary) and a focus on the relations among these quantities. For example, the slope (**m**) is the invariant ratio between “**y**” and “**x**” increments; slope can thus be conceived as an invariant rate of change across co-variation. The “**y-intercept**”(c), could be described as the value of “**y**” when the coordinated value of ‘**x**’ is zero.

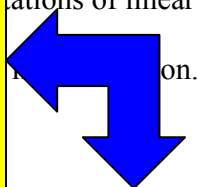
These ideas are signified in the standard representations commonly used to represent the concept. A foundational conception of linear function has been linked to an ability to anticipate connections among these representations in given situations of the concept (Carlson, 1998). Consequently, this dissertation focuses on the nature of students’ connections among standard representations of linear function after having being explicitly taught functions via a multiple

Floating Header example –

Where a new section begins at the bottom of a page. This is a correction that is made at the last minute so page breaks don’t have to be inserted, deleted and reinserted.

Two choices of correction:

1. Bump header to next page.
2. Bring at least two lines of text up underneath header.



Definition of Key Terms

Secondary Header

- Name all capital letters.
LAST NAME, FIRST NAME MIDDLE NAME.
- Period at end of name.
- Single-spaced.
- Left justified

Header

Appendix J– *Abstract Examples*

ABSTRACT

CUTCHINS, ERICA BRAMAN. Rationale for and Relationship of the Thesis and Dissertation Requirement to Research at North Carolina State University. (Under the direction of Dean Duane Larick.)

• Double-space in-between header and text.

This guide for the preparation of electronic theses and dissertations at North Carolina State University is designed to assist graduate students, faculty and staff in understanding the requirements and suggestions of the Graduate School.

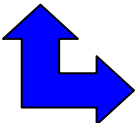
Chair of the Department of Philosophy
 Chair of the Department of Philosophy

• Use sentence exactly as displayed only editing name of chair/co-chairs.
 • Period at end of sentence.

• Title of Thesis/Dissertation.
 • Title on abstract must be identical to the title on the signed title page.
 • Capitalize first letters of all-important words.
 • Title is not to be in all capital letters.
 • Period at end of title.

degrees at NCSU. The purpose of the thesis or dissertation is to provide an experience in scholarship which will be of enduring value to the student in understanding how new knowledge is acquired and communicated within his/her chosen field. Thus, the thesis or dissertation should provide tangible evidence of the student's development as a scholar and especially his/her capacity to discover and effectively communicate research findings. The thesis or dissertation should also enlarge the body of knowledge in the student's chosen field.

North Carolina State University is one of two Research I Universities of the sixteen constituent institutions of the University of North Carolina. By virtue of this designation and its longstanding tradition of scholarship and research in agriculture and life sciences, design, education and psychology, engineering, natural resources, humanities and social sciences, management, physical and mathematical sciences, textiles, and veterinary medicine, a major mission of NCSU is the discovery and communication of knowledge. One significant means



• Abstract text spacing consistent with main body text spacing.
 • Max number of words for the abstract is 600 words.

ABSTRACT

CUTCHINS, ERICA BRAMAN. Rationale for and Relationship of the Thesis and Dissertation Requirement to Research at North Carolina State University. (Under the direction of Dr. Duane Larick.)

This guide for the preparation of electronic theses and dissertations at North Carolina State University (NCSU) is designed to assist graduate students, faculty and staff in understanding the requirements and suggestions of the Graduate School for theses and dissertations. A written thesis is required for most Master of Art and Master of Science degrees and a written dissertation for all Doctor of Philosophy and Doctor of Education degrees at NCSU. The purpose of the thesis or dissertation is to provide an experience in scholarship which will be of enduring value to the student in understanding how new knowledge is acquired and communicated within his/her chosen field. Thus, the thesis or dissertation should provide tangible evidence of the student's development as a scholar and especially his/her capacity to discover and effectively communicate research findings. The thesis or dissertation should also enlarge the body of knowledge in the student's chosen field.

North Carolina State University is one of two Research I Universities of the sixteen constituent institutions of the University of North Carolina. By virtue of this designation and its longstanding tradition of scholarship and research in agriculture and life sciences, design, education and psychology, engineering, natural resources, humanities and social sciences, management, physical and mathematical sciences, textiles, and veterinary medicine, a major mission of NCSU is the discovery and communication of knowledge. One significant means of achieving this important mission is the education of graduate students.

Appendix K- *Copyright Page Example*

© Copyright 2011 by Erica Braman Cutchins

All Rights Reserved

Appendix L- Master Title Page Examples

Rationale for and Relationship of the Thesis and Dissertation
 North Carolina State University

- Title of Thesis/Dissertation.
- Title here must be identical to the title on abstract page.
- Capitalize first letters of all-important words.
- Title not in all capital letters.
- If the title does not fit onto one line, it must be formatted as an inverted pyramid.
- If does not fit onto one line, the lines are single-spaced.
- No period at the end of the title.

- The “b” for by is lower-case
- Name in University Records.
- Name is NOT in all capital letters.
- These two lines are single- spaced.

by
 Erica Braman Cutchins

A thesis submitted to the Graduate Faculty of
 North Carolina State University
 in partial fulfillment of the
 requirements for the Degree of
 Master of Arts

**Master
 Example**

- Paragraph formatted exactly as displayed.
- Paragraph is Single-spaced.

Higher Education Administration

- City, State

Raleigh, North Carolina

- Year degree conferred.

2011

- Degree Program listed, not “department of” or Concentration. See Programs for a complete listing of programs, as they should appear on the title page.
- NOT in all capital letters.

- All caps

APPROVED BY:

 Name of Committee Member

 Name of Committee Member

- Name of Committee Member typed under each signature line.

 Name of Committee Chair
 Chair of Advisory Committee

No page number even though the title page is considered page “i” of preliminaries.

- Identify Committee Chair or Co-chairs.

Rationale for and Relationship of the Thesis and Dissertation Requirement to Research at
North Carolina State University

by
Erica Braman Cutchins

A thesis submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the Degree of
Master of Arts

Higher Education Administration

Raleigh, North Carolina

2011

APPROVED BY:

Name of Committee Member

Name of Committee Member

Name of Committee Chair
Chair of Advisory Committee

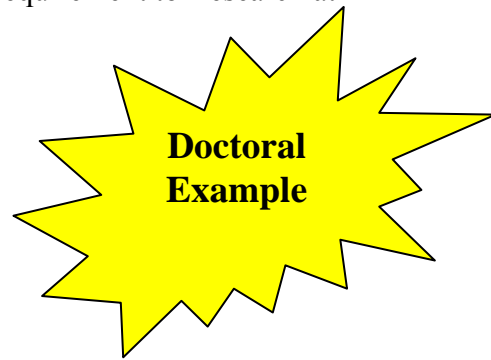
- Title of Thesis/Dissertation.
- Title here must be identical to the title on abstract page.
- Capitalize first letters of all-important words.
- Title not in all capital letters.
- If the title does not fit onto one line, it must be formatted as an inverted pyramid.
- If does not fit onto one line, the lines are single-spaced.
- No period at the end of the title.

Appendix M- Doctoral Title Page Examples

Rationale for and Relationship of the Thesis and Dissertation Requirement to Research at North Carolina State University

- The “b” for by is lower-case
- Name in University Records.
- Name is NOT in all capital letters.
- These two lines are single- spaced.

by
Erica Braman Cutchins



A dissertation submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the Degree of
Doctor of Philosophy

- Paragraph formatted exactly as displayed.
- Paragraph is Single-spaced.

Psychology

- City, State

Raleigh, North Carolina

- Year degree conferred.

2011

- Degree Program listed, not “department of” or Concentration. See Programs for a complete listing of programs, as they should appear on the title page.
- NOT in all capital letters.

- All caps

APPROVED BY:

Name of Committee Member

Name of Committee Member

Name of Committee Member
Chair of Advisory Committee

Name of Committee Member

- Identify Committee Chair or Co-chairs.

- No page number even though the title page is considered page “i” of preliminaries.

Rationale for and Relationship of the Thesis and Dissertation Requirement to Research at
North Carolina State University

by
Erica Braman Cutchins

A dissertation submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the Degree of
Doctor of Philosophy

Psychology

Raleigh, North Carolina

2011

APPROVED BY:

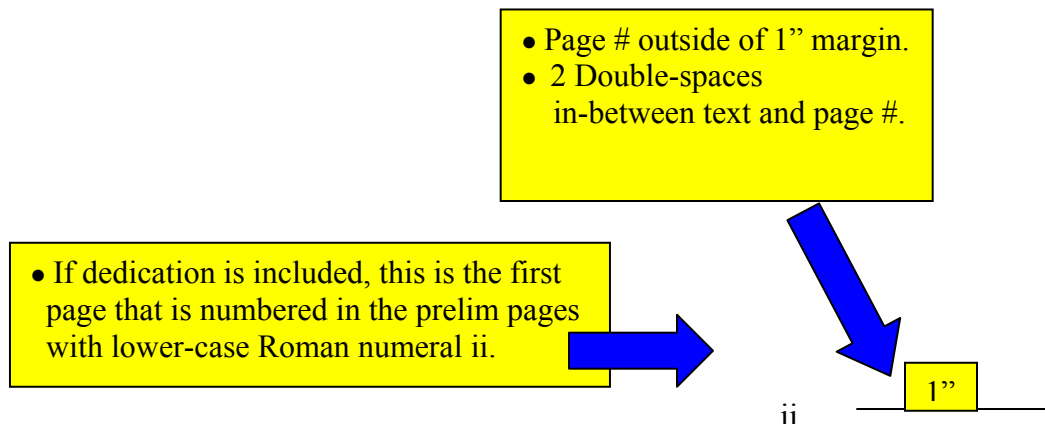
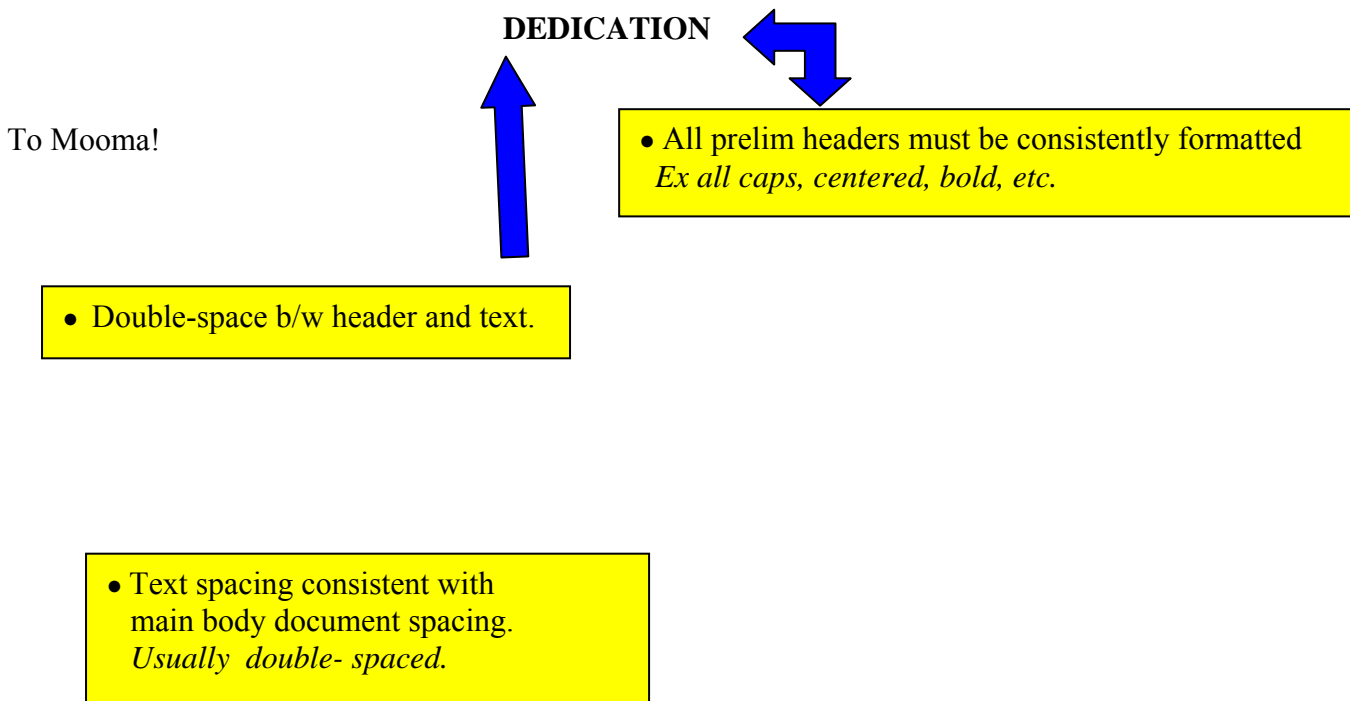
Name of Committee Member

Name of Committee Member

Name of Committee Member
Chair of Advisory Committee

Name of Committee Member

Appendix N- Dedication Page Examples



DEDICATION

To Mooma!

Appendix O- *Biography Page Examples*

BIOGRAPHY

The biography is **REQUIRED**. The biography is personal and appropriate. The student wishes to

• Double-space b/w header and text.

• All prelim headers consistently formatted
All caps, centered, bold, etc.

length requirements or limitations. Please note that this information will be on the World Wide Web for any person the world to view

• Text spacing consistent with document spacing.
Usually double-spaced.

- No example is given of a biography because the format varies for each student. The biography can be one sentence, a few pages, a vita, include pictures, etc.
- The text spacing is to be consistent with the document's text spacing.
- All prelim headers (Abstract, Dedication, Biography, Acknowledgements, Table of Contents, List of Tables, List of Figures, etc) are to be consistent in text size and location. *(EX- All capital letters, centered, left justified, font size, font style, etc)*
- If the student included the dedication, the biography is the second prelim page that has a page #. The page number will be lower case Roman numeral iii.

• Either page ii or page iii depending if the file has a dedication.

• If dedication is NOT included, this is the first page that is numbered in the prelim pages with lower case roman numeral ii.

• Page # outside of 1" margin.
• 2 Double-spaces in-between text and page #.

1"

1"

BIOGRAPHY

The biography is **REQUIRED**. The biography is personal for the student and may contain appropriate information, which the student may wish to share with the reader. There are no length requirements or limitations. Please note that this information will be on the World Wide Web for any person the world to view.

- No example is given of a biography because the format varies for each student. The biography can be one sentence, a few pages, a vita, include pictures, etc.
- The text spacing is to be consistent with the document's text spacing.
- All prelim headers (Abstract, Dedication, Biography, Acknowledgements, Table of Contents, List of Tables, List of Figures, etc) are to be consistent in text size and location. (*EX- All capital letters, centered, left justified, font size, font style, etc*)
- If the student included the dedication, the biography is the second prelim page that has a page #. The page number will be lower case Roman numeral iii.
- If the student did not include a dedication, the biography will be the first prelim page that has a page #. The page number will be lower case Roman numeral ii.
- There must be at least a double-space between the text on the page and the page #.
- The page number must be at least one inch from the edge of the page.

- All prelim headers consistently formatted.
All caps, centered, bold, etc.

Appendix P- Acknowledgement Page Examples

ACKNOWLEDGEMENTS

- Double-space b/w header and text.

Acknowledgments are optional. The acknowledgments are personal for the student and may contain appropriate information, which the student may wish to share with the reader. There

- Text spacing consistent with document spacing.
Usually double-spaced.

s. Please note that this information will be on the World Wide Web for anyone on the world to view.

- No example is given of an acknowledgements page because the format varies for each student. The acknowledgements page is where the student can thank everyone and anyone that had an influence on her/his education, life, etc.
- The text spacing is to be consistent with the document's text spacing.
- All prelim headers (Abstract, Dedication, Biography, Acknowledgements, Table of Contents, List of Tables, List of Figures, etc) are to be consistent in text size and location. (*EX- All capital letters, centered, left justified, font size, font style, etc*)
- If the student included the dedication, the acknowledgments is the third prelim page that has a page #. The page number will be lower case Roman numeral iv.

Either page iii or page iv depending if the file has a dedication.

- Page # outside of 1" margin.
- 2 Double-spaces in-between text and page #.

- Page number is lower case roman numerals following preceding page #.

ACKNOWLEDGEMENTS

Acknowledgments are optional. The acknowledgments are personal for the student and may contain appropriate information, which the student may wish to share with the reader. There are no length requirements or limitations. Please note that this information will be on the World Wide Web for any person the world to view.

- No example is given of an acknowledgements page because the format varies for each student. The acknowledgements page is where the student can thank everyone and anyone that had an influence on her/his education, life, etc.
- The text spacing is to be consistent with the document's text spacing.
- All prelim headers (Abstract, Dedication, Biography, Acknowledgements, Table of Contents, List of Tables, List of Figures, etc) are to be consistent in text size and location. (*EX- All capital letters, centered, left justified, font size, font style, etc*)
- If the student included the dedication, the acknowledgments is the third prelim page that has a page #. The page number will be lower case Roman numeral iv.
- There must be at least a double-space between the text on the page and the page #.
- The page number must be at least one inch from the edge of the page.

- All prelim headers consistently formatted. *All caps, centered, bold, etc.*

Appendix Q- Table of Contents Page Examples

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- First two required listings.
- If not tables or figures, no lists required.

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- Double-space b/w header and text.

The format of your ToC depends on your style guide. This is ONE example.

- Periods or line connecting text to page number.
- Each ends in a straight line.

- Listings match what is on the respective page exactly.
- Ex. **References Cited** on 40. When I turn to page 40, it should not say *Literature Cited*.

- All page #'s and connecting periods are in exact straight line.

- Page # outside of 1" margin.
- 2 Double-spaces in-between text and page #.

- Page number is lower case roman numerals following preceding page #.

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• All prelim headers consistently formatted.
All caps, centered, bold, etc.

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The format of your LoT depends on your style guide. This is ONE example.

• Periods or line connecting text to page number.
• Each ends in a straight line.

• Table listings in LoT are identical to table # and caption on the respective page.

• Page number is lower case Roman numerals following preceding page #.

• Page # outside of 1" margin.
• 2 Double-spaces in-between text and page #.

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All caps, centered, bold, etc.

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• Double-space b/w header and text.

The format of your LoF depends on your style guide. This is ONE example.

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• Each ends in a straight line.

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• Figure listings in LoF are identical to figure # and caption on the respective page.

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LITERATURE REVIEW

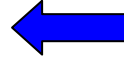
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Appendix T- *References Page Examples***REFERENCES**

- Double-space b/w header and text.

Akyildiz, I.F., W. Su, Y. Sankarasubramaniam and E. Cayirci (2002). "A survey on sensor networks," *IEEE Communications Magazine*, 40(8), 102-114.

Bolen, S.M. and V. Chandrasekar (2003). "Methodology for aligning and comparing spaceborne radar and ground-based radar observations," *Journal of Atmospheric and Oceanic Technology*, 20(5), 647-659.

Butler, Z. and D. Rus (2003). "Event-based motion control for mobile-sensor networks," *IEEE Pervasive Computing*, 2(4), 34-42.

Gerkey, B.P. and M.J. Mataric (2004). "A formal analysis and taxonomy of task allocation in multi-robot systems," *The International Journal of Robotics Research*, 23(9), 939-954.

Ballistic Missile Defense System [BMDS] Booklet, *Global Ballistic Missile Defense: A Layered Integrated Defense*, (Missile Defense Agency, Washington DC, 1 April 2006).



- Double-space in-between each reference listing.

Harris, B., F. Lewis and D.J. Cook (1998). "Machine planning for manufacturing dynamic resource allocation and on-line supervisory control," *Journal of Intelligent Manufacturing*, 9(5), 413-430.

Joint Publication [JP] 3-01, *Countering Air and Missile Threats* (Headquarters, Department of Defense, Washington, DC, 5 February 2007).

Joint Publication [JP] 3-14, *Joint Doctrine for Space Operations* (Headquarters, Department of Defense, Washington, DC, 9 August 2002).

Joint Publication [JP] 3-60, *Joint Targeting* (Director of Operations, United States Air Force, Washington, DC, 13 April 2007).

Kusiak, A. and J. Ahn (1992). "Intelligent scheduling of automated machining systems," *Computer-Integrated Manufacturing Systems*, 5(1), 3-14.

Liu, Y., M.A. Simaan and J.B. Cruz Jr. (2003). "An application of dynamic Nash task assignment strategies to multi-team military air operations," *Automatica*, 39(8), 1469-1478.

REFERENCES

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- Bolen, S.M. and V. Chandrasekar (2003). "Methodology for aligning and comparing spaceborne radar and ground-based radar observations," *Journal of Atmospheric and Oceanic Technology*, 20(5), 647-659.
- Butler, Z. and D. Rus (2003). "Event-based motion control for mobile-sensor networks," *IEEE Pervasive Computing*, 2(4), 34-42.
- Gerkey, B.P. and M.J. Mataric (2004). "A formal analysis and taxonomy of task allocation in multi-robot systems," *The International Journal of Robotics Research*, 23(9), 939-954.
- Ballistic Missile Defense System [BMDS] Booklet, *Global Ballistic Missile Defense: A Layered Integrated Defense*, (Missile Defense Agency, Washington, DC, 1 April 2006).
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- Liu, Y., M.A. Simaan and J.B. Cruz Jr. (2003). "An application of dynamic Nash task assignment strategies to multi-team military air operations," *Automatica*, 39(8), 1469-1478.

Appendix U- *Appenedix Introduction Page Examples*

APPENDIX



- Either the word appendix or appendices.
- The respective page # following the last page of references.
- Nothing else on the page except for the page header and page #.

APPENDIX