

Central Connecticut State University

THE MASTER'S THESIS

A Handbook and Writer's Guide for Graduate Students

CENTRAL CONNECTICUT STAT

Revised November 2019

THE MASTER'S THESIS A Handbook and Writer's Guide for Graduate Students **Table of Contents**

	<u>Page</u>
Introduction	1
Chapter 1 What is a Thesis? • Quantitative versus Qualitative Theses	2
Chapter 2 The Thesis Process	4
Chapter 3 University Policies and Requirements Registering for the Thesis Thesis Workshop Continuing Registration (CREG Fee) Thesis Committee Use of Human Subjects or Animals in Your Research Thesis Proposal Thesis Formats	12
Thesis Style Requirements	16
Policies Regarding Approval of Thesis	17 ormat

Table of Contents (Continued)

Chapter 4	
Specific Department Requirements	20
Department Requirements	
 Examples of Outstanding Theses 	
References	26

Introduction

Congratulations! You are going to write a Master's thesis, a demanding and intellectually challenging task. As one of the capstone experiences of graduate study at Central Connecticut State University, the Master's thesis signifies a *rite of passage*. You will learn and practice the skills required for organized research and documentation, analysis of information, and effective written communication. You are making the transition from one who is a <u>consumer</u> of knowledge to one who actively <u>contributes to</u> the knowledge base of their discipline. *You are becoming part of the Graduate Studies Community of Scholars by advancing knowledge through your research*.

This handbook is prepared so that students may successfully complete their thesis work. It contains an overview of the thesis process, from start to finish, as well as specific thesis requirements of individual departments. It has four chapters. Chapter 1 defines what a thesis is, while Chapter 2 provides an overview of the thesis process-the steps one must take from the initial conceptualization of a possible thesis idea to the finished project. The third chapter discusses specific standards required by the School of Graduate Studies. Chapter 4 enumerates specific departmental requirements. All forms can be found on the School of Graduate Studies Forms webpage; http://www.ccsu.edu/grad/resources/forms.html.

Because you cannot register for the Thesis online, the Capstone Registration Form is needed during the period of registration. In order for you to get credit for your Thesis, the capstone registration form must be signed and submitted to the School of Graduate Studies, prior to the end of the add/drop period. Additional forms needed can be found on the website above and include: http://www.ccsu.edu/grad/resources/thesis.html. The Thesis Checklist provides a checklist of all items that must be included at the time of submission. The rubric developed and approved by the Graduate Studies Committee is meant to inform you of some of the criteria by which your thesis will be assessed. Other forms include important information on the Institutional Review Board (IRB) and the Institutional Animal Care and Use Committee (IACUC) as well as samples of forms and documents that are needed for your thesis, from your first registration to the final submission of your thesis.

Thank you to Professor Marc Goldstein of the Psychological Science Department for his help in preparing the first iteration of this handbook. Thank you also to members of the Graduate Studies Committee for their dedication to upholding the standards and quality of CCSU's graduate programs.

While every effort will be made to keep this *Handbook* up-to-date, please confer with your graduate advisor about any recent changes that may have taken place. You may also contact the School of Graduate Studies, located in Barrows 120 and at 860-832-2363, if you have questions.

Writing a thesis takes time, hard work, and patience. Nonetheless, you should find it to be a worthwhile and rewarding endeavor. Many faculty members, along with the School of Graduate Studies staff, are ready to support you. I wish you successful completion of your thesis work.

Christina A. Robinson

Christina A. Robinson, Ph.D.

Interim Associate Vice President for Graduate Studies, Research, and Faculty Development

Chapter 1

What is a Thesis?

Preparing a Master's thesis is a time-honored tradition in academe, yet many students who are about to undertake such a project have only the vaguest notion of what a thesis entails. Students may perceive the thesis as a formidable process; yet this does not need to be the case. All theses should be based on the compilation of knowledge and skills acquired throughout the student's graduate program.

However, no single definition of a thesis exists. What constitutes an appropriate thesis varies considerably between disciplines and even between faculty members within a discipline. Given this lack of uniformity regarding what a thesis is (and the resulting anxiety it invokes in students!), how can we describe a thesis? Here are four common characteristics.

First, a thesis is **an exercise in research**. You are asked to demonstrate your skills in using the methodologies of your field to examine a topic of interest to your discipline.

What constitutes research methodology varies widely across fields. For example, in the physical sciences, research often (but not always) involves the use of experimental procedures in a laboratory setting; in the humanities, research may involve a descriptive or interpretative analysis of some piece of literature; and in the social sciences, research may involve surveys or field studies.

Various academic departments have identified examples of good Master's theses written by CCSU graduate students (in Chapter 4, Table 4-2.). You may want to look at a complete thesis (available on Stack 1 of the Burritt Library) to get a better idea of the types of methodologies used. In addition, the full text of many more recently submitted theses (those numbered 1453 onward for which author permission has been granted) are available through the Elihu Burritt Library's Digital Repository (http://content.library.ccsu.edu).

A topic of interest to your discipline means an area of research that is generally viewed as fruitful by other researchers in the field. Within any discipline, there are typically many subfields of interest. Research activities, such as a thesis, usually focus on a limited area, exploring a very specific issue or question. Again, looking at the titles of the theses listed in Chapter 4 will give you an idea of the specificity of the typical thesis.

A second characteristic of a thesis is that, no matter what the topic or methodology used, the intent of the research is to make a **contribution to the field**. A contribution is any "new" information that you can give to your discipline. This can take many forms: a test of a new theory, a reinterpretation of an old poem, or an evaluation of a curriculum.

The list is endless, but the common element is this: an addition to the knowledge base of your field requires you to have an in-depth understanding of some particular area of your discipline. And, you must know the current "state of the art" if you are to add to it.

In this regard, a thesis represents the capstone activity of your graduate degree program. To complete it successfully, you must demonstrate mastery over both a specific content area AND the methodology of your discipline. Indeed, the Master's degree has traditionally identified one

as both an intelligent consumer of information and as a contributor to the field of study.

Third, a thesis represents an opportunity to work closely with one or more faculty members in your field. One characteristic of good graduate education is the opportunity for faculty and students to work together in a close relationship characterized as mentoring. While much of the content of any field can be taught in traditional classes, there is always some art to any discipline. These nuances are best conveyed in the context of a close working relationship. Working on a thesis under the tutelage of faculty provides an opportunity for learning that is not always found in other graduate school activities.

The fourth and final characteristic of a thesis is more personal in nature: A thesis is an exercise in self-discipline. Completing a thesis requires sustained initiative and focus for an extended period of time. Unlike classes, there are no fixed times which you must meet or specific deadlines imposed by the instructor. YOU provide the structure. The choice of topic and faculty advisors is largely yours. Indeed, faculty will generally look to you to be the initiator of your thesis work. A Master's degree acknowledges you as a professional in your field, and the mark of a professional is the ability to be self-motivated and self-directed.

To recap, a thesis is a written document that entails an independent research activity undertaken to explore some question, problem or topic of interest to the field. The goal of this activity is to add new knowledge to the discipline and to demonstrate competency and worthiness of an advanced degree in the field.

Quantitative versus Qualitative Theses

Quantitative research studies typically yield statistical analyses of numerical data. Quantitative approaches—those that use "quantitative data obtained from samples of observations in order to... help make decisions to accept or reject hypothesized relationships ...between groups or classes of subjects" (Rudestam & Newton, 1992, p. 24)—have been pre-eminent. Thomas (2003) describes quantitative research as "the current status of people and events in terms of amount and frequencies" (p. 41). Three common types of quantitative methods involve surveys, correlation analyses, and experiments.

Qualitative approaches deal with the "meaning of things" (Lincoln & Guba, 1985). There is "greater emphasis on holistic description—that is, on describing in detail all of what goes on in a particular activity or situation, rather than on comparing the effects of a particular treatment (as in experimental research), or on describing the attitudes or behaviors of people (as in survey research)" (Wallen & Fraenkel, 2001, p. 432-433). In this way qualitative approaches are "verbal portrayals of the current status of people and events in terms of kinds of characteristics and actions" (Thomas, p.33). Case studies, ethnographies, and narrative experiences are just a few methods associated with qualitative research. Qualitative approaches involve clear standards regarding the documentation of observations and their interpretation.

Studies also may combine research methods that include both types of quantitative and qualitative research (Thomas, 2003).

Chapter 2

The Thesis Process

This section attempts to describe, in some detail, the sequence of steps one goes through in planning, executing, and writing a thesis.

Listed in Figure 2-1 are major steps in the thesis process. While the tabular presentation implies a linear progression, in fact, it rarely happens that way. For example, students could be selecting a thesis advisor (and perhaps other committee members) while they are identifying and/or refining their thesis idea. For ease of presentation, however, steps are discussed in the order shown.

The first and often most difficult step for many students is selecting a thesis idea. Many students expect that a thesis topic should suddenly come to them as a result of their own reflection. While at times this does happen, a more common process is that a person first identifies a general topic area and then, following more examination of that area and consultation with his/her advisor, the student begins to focus more specifically on a topic that is appropriate for a thesis.

Thus, the first step is to identify a general research area that you would like to pursue. The sources of this research area are varied: it may represent an area in which you have had a long-standing interest; it may be a topic you found stimulating in one of your classes; it may arise through discussions with instructors, your advisor, or classmates; it may come from reading current books or journals in your field; or it may come from some organization or group that has designated this topic of interest or a problem.

Some Do's and Don'ts for Selecting Thesis Topics¹

- 1. **Do** choose an idea that can sustain your interest over a long period of time.
- 2. **Do** write down interesting ideas, thoughts and quotations as you come across them in your readings as well as notes on discussions with faculty and peers, etc.
- 3. **Do not** choose topics that are overly ambitious. No thesis will be the final word on any particular topic. As one student put it: There are two types of theses: the great ones and the ones that are completed.
- 4. **Do not** go it alone. Coming up with a topic is a negotiated effort between you and your advisor. Regularly talk with your advisor about your ideas.

¹adapted from Rudestam & Newton, 1992.

Figure 2-1

Steps in the Thesis Process Submit Graduate CAPSTONE Course Registration to School of Graduate Studies Choosing a Research Area _____ _____ Developing/Refining a Thesis Idea Selecting a Thesis Advisor and Committee _____ Preparing and Submitting a Thesis Proposal (Capstone Proposal Form) Institutional Review Board or IACUC Approval (As required by Thesis Topic) Conducting the Research _____ Interpreting the Results

Completing the Written Thesis

Oral Defense of Thesis¹

Submitting the Thesis for Approval (Final Capstone Submission Form)

¹Not required by all Departments, see Table 4-1

Once you've identified a general problem area in which you are interested, you will need to refine it into a specific, workable project. A key part of this process will involve a critical literature review of the field. This review will do several things: (1) make you aware of the current "state of the art" and review of literature in your field; (2) help you begin to identify the gaps, *i.e.*, what key issues or questions around this topic need to be explored; and (3) inform you about the kinds of methodologies that have been used to explore aspects of this topic. Keeping good notes on the material you read (including all information needed for a proper bibliographic citation in the thesis style utilized in your department) will help you when you write your thesis proposal.

Today, almost all literature searches begin with (but are not limited to!) electronic search techniques. All major journals & databases are computerized and can be searched via author, title, subject, and/or keyword. A complete description of how to use the various electronic databases is beyond the scope of this manual, but Elihu Burritt Library provides specific instructions on using the many databases available through their Central Search Library Platform and in the Reference section (second floor) of the library. They also offer a variety of classes in search techniques. Please consult with the Reference Librarian for further information.

As you read through the literature, you will gain a better understanding of what is known about your topic and key unanswered questions. Indeed, some people have likened the thesis process to a large jigsaw puzzle with a piece missing. Your research goal is to help fill in the gap in your field.

Thesis Advisor

At this point, it is advisable to begin discussing your thesis idea with faculty in your department. If you have not already done so, you will want to identify a **thesis advisor** who will be very helpful as you determine the suitability of a potential topic. Suitability refers <u>not</u> only to the quality of the idea, but to logistical considerations that will have an impact on your ability to complete the thesis. Indeed, students often have good research ideas which, for a variety of reasons, they may be unable to carry out.

Five Key Issues

Five key issues to consider: (1) time, (2) cost, (3) access to needed resources, (4) faculty support, and (5) approval. The first consideration is time: How long will the project take? A thesis should represent a substantial effort on one's part, but it is not expected to be one's life work. While there are no hard and fast guidelines, a thesis project (once a workable idea is developed) should take no more than 12 months. Many theses are done in considerably less time, although some take considerably more time to complete. A student who puts in regular, consistent effort on the project and meets regularly with their faculty advisor should be able to bring their thesis to a successful close. However, lack of sustained commitment can make completion of a thesis take years. If it seems that a possible topic would take a long time to complete (assuming regular effort), you should consider narrowing the topic or selecting another topic.

A second consideration is cost. Will the project entail considerable out-of-pocket expense? Most students expect to (and do) spend some money on research expenses, but the amount should not be excessive. If your project requires extensive travel or the use of expensive materials, you should explore possible sources of financial support. For example, the Graduate

Student Association (GSA) offers funds to help support student research. Please visit the Graduate Student Association (GSA) website: https://www.ccsu.edu/gsa/funding.html for funding information. Your thesis advisor also may have access to research funds to help defray your costs. Depending on your topic, you might be able to get some support from business and industry, philanthropic foundations, and/or professional associations. If funds are not available, and there are substantial costs involved, you may want to rethink your project.

A third consideration is access to needed resources. If your work depends on access to certain library materials or other documents, *e.g.*, agency records, a key question is whether the materials are available. If certain materials are essential for the research, you should check whether thesis materials are obtainable before extensive effort is made in planning the study in more detail. Projects sometime require documents that turn out to be hard to obtain. You may want to set an arbitrary time limit on securing key material. If, for example, the materials you need are under another person's control, such as a school principal or agency director, you may choose to pursue the project (assuming other factors make it seem worthwhile) for no more than six weeks. If after that time, no clear progress has been made in obtaining the needed material, it may be prudent to rethink the feasibility of the project.

A fourth issue that falls under the heading of feasibility is the availability of faculty support. It is in your best interest to connect with at least one faculty member in your program who shares an interest in your proposed topic and who has expertise in this area. If no one in the department has the interest or expertise to assist you, your project probably won't get off the ground. Although some departments may allow you to go outside the department to find committee members, it is essential that at least one member of the department has sufficient skills and expertise in your area of interest to be able to assist you. Without such assistance, you can get stuck at some point in your research and have no one to help you.

A final and very important concern involves clearance of a research proposal through institutional review procedures. Before submitting your proposal for review to the Institutional Review Board (IRB) or Institutional Animal Care and Use Committee, your thesis advisor needs to review and sign the related forms. While CCSU has its own set of Human Studies and Animal Care review procedures (see forms respectively), if your research involves another institution (e.g., school, hospital laboratory), your research proposal may also require review and approval from that institution. It is critically important that you identify the nature of the review mechanism, collect or prepare the documents you will need to submit, and allow sufficient time for review. In some cases, institutional review groups meet only a few times each year; failure to submit your project for review at the appropriate time may seriously delay your research schedule. It is important to remember that clearance from IRB or IACUC must be given before you begin any data collection.

If your topic seems suitable when tested against the above criteria, the next step is to formally establish your thesis committee. Individual departments have different requirements regarding membership on thesis committees (see table 4.1); some require two members, others three. In some departments, the committee must consist entirely of department members; in others, you may select qualified individuals from outside the department or even outside the university.

If you have been discussing your thesis ideas with your thesis advisor, you might already know who will serve on your committee. On the other hand, if you have developed your thesis idea without consultation with any faculty (which is not recommended!), you may not have a clear

idea of who should serve on your thesis committee. In this case, you should talk with your program advisor and the department chairperson; they will know the areas of interest and expertise of the department faculty and will be able to recommend specific people.

In selecting your committee members, you should keep their role in mind. The purpose of the thesis committee is to help you develop and shape your thesis idea, to mentor you as you work on the project, and to evaluate the finished product—the thesis—that you produce. Consequently, your committee should consist of faculty who have a general interest in your proposed area of study, have the kinds of expertise needed to guide and assist you, and are individuals with whom you can work comfortably.

The need for interest and expertise on the committee's part is quite obvious, but you should clearly assess the types of competence needed. Often it is valuable to have individuals whose skills lie in different but complementary areas. For example, you might want one faculty member who is knowledgeable in the particular content area of your thesis and a second who has expertise in research methodology.

Theses (and thesis proposals) go through several revisions, reflecting both conceptual and stylistic changes. It is important to have committee members assisting you whom you trust and from whom you can accept honest and sometimes critical feedback. The thesis process presents an opportunity for a close working relationship that can be a powerful learning experience, but there has to be a certain amount of "personal chemistry" for this to develop.

Finally, thesis committee members must work well with one another. It is probably not wise to select individuals who have an uncomfortable working relationship.

Once you have chosen a committee, you will be talking with the members as you refine your interest area into a specific thesis topic and develop specific hypotheses or research questions. Typically, this is an iterative process that cycles between reading the literature and discussions with your committee members. It is during this period that you will be completing your critical review of the literature and/or your initial bibliography, depending on the thrust of your study. As you decide upon the specific research questions and methodology you will use, issues of experimental design, measuring instruments, statistical analyses and the like become important. It is crucial that you use the available expertise of your committee on these issues.

All the reading, deliberation and discussion with your committee should culminate in the writing of your thesis proposal. Chapter 3 describes the specific components of the thesis proposal. While the proposal is essentially an action plan, it can also represent, if done carefully, the first several chapters of your thesis. While many students think of the proposal as a hurdle one must negotiate before getting to the "real" work, a well-crafted proposal often represents significant progress toward the end product. For more discussion of the preparation of a proposal, see Cone and Foster (1997); Krathwohl, (1988).

Human or Animal Subjects

If the research involves either **human or animal subjects**, you and your committee must submit appropriate forms to the Institutional Review Board or the Institutional Animal Care and Use Committee. Approval from the appropriate committee is <u>required</u> *before* data collection/research can begin. Indeed, starting your research without IRB approval is unethical and potentially

exposes you and the university to legal complications. (More information about these committees is given in Chapter 3.) After your thesis proposal has been reviewed and accepted by your committee, the committee should send a copy of the proposal and a signed <u>Capstone Proposal Form</u> to the School of Graduate Studies.

Following submission and approval of the proposal (as well as from the appropriate subject committee as noted above), the research effort is ready to begin in earnest: experiments are conducted; surveys are distributed; historical works are examined; curriculums are evaluated, etc. For many students this part of the process, which they expect to be tedious, turns out to be exciting. The intellectual challenge of the research endeavor is experienced in a way that is never captured in the dry accounts that typify most academic journals and books.

While engaged in this phase of your thesis, you should keep in close touch with your committee. Problems or questions will often arise (hopefully minor) that may require some modification of your research plan. Consulting with your committee about possible changes will minimize misunderstandings about such alterations later.

The analysis and interpretation of one's results are often the most challenging parts of the project. As the results are examined and initial hypotheses or expectations confirmed or negated, students begin to understand, more clearly than ever before, the human side of the research enterprise. Results are never as clear cut as they seem to be in print; different interpretations now seem plausible; shortcomings in methods are seen in hindsight; and directions for new research emerge. Once again, it is important to consult with your committee as you formulate the conclusions and recommendations that your work will add to your discipline.

Effective Strategies

If producing and interpreting the data (in whatever form they take) are more exciting than most students expect, writing the thesis is often more painful than students anticipate. Simply put, writing is hard work. If it is any consolation, it is hard work for everyone. There are, however, several **effective strategies** that you can follow that will make you more productive.

First, understand that revisions are inevitable and using and saving copies to your computer will make that task relatively painless. Also, word processing packages contain spelling and grammar checks which can help with the writing process. The Writing Center offers many resources as well, including staff which can assist with revisions. Moreover, there are specialized word processing programs available that can help you with formatting issues. If you don't own or have access to a computer, they are available on campus, primarily in the Student Technology Center in Marcus White Annex.

The second trick is to <u>write something everyday</u>—even if it is only a few paragraphs. Getting something down on paper (or stored on the computer) is the hard part; it is always easier to revise once you've gotten the basic idea down. Don't worry if it doesn't sound "right" in its original form - that's what revision is for! If you've done a good job in putting your proposal together, you probably can use most or all the proposal with some modification.

Thirdly, don't feel that you have to write the whole thesis before you can ask your committee for feedback on what you've written. It is best to submit materials (at least to your committee chair)

one chapter at a time. Your committee is there to help you: let them.

A word to procrastinators. You really want to finish and get that degree. If it seems, somehow, that you just never seem to get down to writing, put pressure on yourself. Strike a deal with your thesis advisor. Agree to call weekly telling him or her of your progress. Call even when—and especially when—you have done nothing. Finding other students who are writing their theses can also be a good source of encouragement. You can join or form a writing group. Call regularly and commiserate. Set small but realistic goals.

Also, keep in mind that each semester you have not completed the thesis, you will see a grade of INC (Incomplete) on your transcript. A Continuing Registration fee of \$40 (plus the \$65 registration fee) must be paid each semester when you do not register for any other courses. (The fee is due upon registering for CREG 001.)

Oral Presentation or Defense

Some departments (see Table 4.1) require that students completing a thesis must make an **oral presentation**, **or defend**, their thesis before their committee members officially approve it. The oral defense is done after a completed version of the thesis has been presented to members of the committee to read. As Cone and Foster (1997) describe it:

Committee members will ask you to explain what you did, what you found, and what it means, and to discuss your research intelligently in the context of others' findings in the area. They will be looking for evidence that you (a) understand what you did and why, (b) can think about your project from a scientific perspective, and (c) can describe what you did to others (p. 256).

Typically, the oral defense of a thesis will begin with the student making a short (15-30 minutes) presentation about his or her project followed by questions from committee members. Faculty may ask the student to explain the meaning of the results and how they might be interpreted from different theoretical perspectives than those presented in the thesis. It also is not uncommon for the committee to ask for minor revisions to the text of the thesis.

The best preparation for the oral defense is to be intimately familiar with what you did and the rationale for your approach. Be sure to talk with your thesis advisor about the format of the defense, *e.g.*, how long should it last, what type of presentation you're expected to make, etc. It may be helpful to talk with other students who have recently been through the process. For a more detailed discussion of the oral defense, see Cone and Foster (1997, Chapter 14).

Once your committee has approved your thesis, the instructions in Chapter 3 of this handbook regarding submission of the thesis should be followed. You will need to make copies, complete with abstracts, for submission. Your committee will sign a <u>Final Capstone Submission Form</u> of your thesis in addition to the original.

It is always a good idea for you to check with your advisor or the School of Graduate Studies after your thesis has been submitted to be sure that you have completed all requirements for graduation. If you haven't completed a Graduation/Program Completion Application form, be sure to do so. (Applications are available on the graduate website (www.ccsu.edu/grad.) The Graduate School will conduct an audit of your planned program. If all requirements are met

(including a grade submitted by your thesis advisor for the thesis and final approval from the School of Graduate Studies), your name will be added to the list of graduates.

That's it! Go home and tell your significant other, family, or friends to celebrate with you. You've earned it!

Chapter 3

University Policies and Requirements

Registering for the Thesis

To register for the thesis, **Plan A**, you must complete the Graduate Capstone Course Registration form, sign it and then obtain the signatures of your Faculty Thesis Advisor, Department Chair and Academic Dean. The form must then be submitted to the School of Graduate Studies for the signature of the Graduate Dean or their designee. You should register for the thesis in the semester you intend to begin work with your Thesis advisor on the <u>proposal</u>. You must register using the Capstone *Course Registration Form* during the regular registration period. It will <u>not</u> be accepted after the add/drop period ends (i.e. after the third week of classes).

In order for you to register for the thesis capstone, graduate policy requires that you have at least a 3.00 overall GPA and that you have completed 18 credits for programs with 30-35 credits or 24 credits for programs with 36 or more credits.

Thesis Workshop

Students enrolled in a thesis course are strongly encouraged to attend a thesis workshop. Held each fall, representatives from the library and the Institutional Review Board will present important guidance on the thesis process and be able to answer any questions.

Continuing Registration Course (CREG 001)

Students only register for their Capstone one time. During fall and spring semesters in which no course work is taken, matriculated graduate students involved in completing Theses (Plan A), Comprehensive Examinations (Plan B), or Special Projects (Plan C or E) must register for the Continuing Registration Course. The course fee is \$40, plus the University registration fee.

If the student receives a grade of incomplete (INC), the student then must register for CREG 001 each fall and spring semester until the thesis is completed and a grade change has been submitted to the Dean's office. This allows students continued access to computer facilities, the library, parking, and the faculty.

A matriculated graduate student who fails to pay the Continuing Registration Fee (CREG) for the Capstone Plan A, B, C or E will be withdrawn and lose his/her matriculation status. Matriculated graduate students withdrawn for this reason will have to re-apply and pay a Reenrollment Fee of \$50 to regain their matriculation. The length of time to obtain a graduate degree cannot exceed 6 years unless an extension is granted.

For a student enrolled in a thesis, the capstone advisor can require regular progress reports from the student. Based on a lack of progress, the advisor can choose not to recommend an extension beyond the six-year time limit. Further, the advisor can choose to assign a failing grade for the thesis.

The Thesis Committee

Your work on a thesis will be under the direction of a thesis committee. The Policy of the University's Graduate Studies Committee is that all thesis committees will consist of, at minimum, a thesis advisor and one additional faculty member. The chairperson of your committee must be a full-time faculty member from the Department in which you are earning your degree. Individual departments may have additional requirements in regard to the size and membership of the thesis committee beyond the above minimum. Please see Chapter 4 for the specific requirements of your department.

Use of Human Subjects or Animals in Your Research

In keeping with current federal standards and regulations, all research involving human or animal subjects must be approved by the appropriate campus committee: the Institutional Review Board (IRB) or the Institutional Animal Care and Use Committee, (IACUC). These groups function to insure that appropriate safeguards are used to protect the rights and well-being of research subjects. See the Description of the Institutional Review Board (IRB) and the Institutional Animal Care and Use Committee form for a more complete description of these committees. IRB approval and exemption forms are contained on their website as noted in the Description of the IRB and the Institutional Animal Care and Use Committee form. The Institutional Animal Care and Use Committee Application for Project Approval is also available on the Master's Thesis forms webpage.

In cases where research is being performed at another institution involving human or animal subjects, approval must be obtained from appropriate review committees at that institution. Copies of such approval should be attached to the CCSU forms to expedite the review process.

Thesis Proposal

A thesis proposal is, essentially, a written "action plan" of what you intend to do (your topic) and how you intend to do it (your methodology). Table 3-1 suggests the contents of a proposal for an investigative study, while Table 3-2 suggests the typical format of a descriptive or historical study. The proposal must be developed with the advice of your thesis committee.

Both types of studies (historical and experimental) begin with the specification of the title (A) of the proposed research followed by a description of purpose (B), and the specific hypothesis or research question(s) that your work will examine (C).

Next, you must address the question of need (pertinence): How is your proposed research a contribution to the field? This is often best answered by first providing a selective review of the related research (D), and, then, showing how your work will fill a gap, or, in other words, clarify, extend, or apply the work of others (E).

For investigatory or experimental theses, the next section of your proposal (*F*) describes the methodology you will use. It is important to provide enough detail of your research design and procedures so that members of your committee will have a clear picture of exactly how you plan to conduct your study. A major purpose of this section of the proposal is to force you to think through your study; the feedback you receive from your committee regarding your methods will

make your thesis more focused and, ultimately, make the time you invest in it more productive. The methodology section will also describe how you intend to analyze or evaluate your findings in terms of the research questions you initially posed.

No single research effort or methodology can answer all of the relevant questions on a particular topic. Consequently, for both type of studies you should **note the limitations of your study** (*G*), both methodological and conceptual. Identifying such limitations does not imply a shortcoming of your work, but rather, suggests a realistic appraisal of the boundaries of any single, time-limited research endeavor.

The final section of the two outlines includes references mentioned in your proposal or the beginning bibliography (H).

Appendices (For maximum clarity, please provide a title for any appendix you may include in the table of contents; example- Appendix A: Participant Questionnaire, etc.)

A note on writing style: All theses and proposals submitted should be in size 12, Times New Roman font. Different disciplines use different formats or style sheets for their professional writing. The formats used by Departments at CCSU *include*:

- ACS (American Chemical Society Style Guide; American Chemical Society)
- *APA* (<u>Publication Manual of the American Psychological Association</u>; American Psychological Association)
- Campbell (Form and Style: Research papers, reports, thesis; Slade, Campbell & Ballou)
- *CBE* (Scientific Style and Format: The CBE manual for authors, editors and publishers; Council of Biology Editor's Style Manual Committee)
- Chicago (<u>The Chicago Manual of Style: For authors, editors and copywriters;</u> University of Chicago Press)
- MLA (The MLA Style Manual and Guide to Scholarly Publishing; Gibaldi).

**Check Chapter 4 for the style used by your department and follow that style in writing your proposal.

Once your proposal has been approved by your committee, a copy of the proposal and <u>Capstone Proposal Form</u>, signed by your committee or at least by your thesis advisor, must be sent to, approved, and signed by Dean, School of Graduate Studies or designee. No research should begin prior to approval from Dean, School of Graduate Studies or designee.

Thesis Formats

Table 3-1 A Sample Outline of an Investigative or Experimental Thesis

- A. Title of proposed thesis
- B. Statement of purpose(s)
- C. Stated Hypothesis/Research Questions
- D. Relationship of study to related research and analysis of pertinent research (literature review)
- E. Statement of need
- F. Investigatory or experimental procedures to be followed:
 - 1) subjects to be used
 - 2) measures used (surveys/interviews/psychological instruments, etc)
 - 3) experimental design or intervention
 - 4) procedures to be followed
 - 5) plan for the analysis of data
- G. Limitations of your project (limiting factors which affect study)
- H. References
- I. Appendices (For maximum clarity, please provide a title for each appendix in the table of contents; example- Appendix A: IRB Forms, Appendix B: Participant Questionnaire, etc.)

Table 3-2 <u>A Sample Outline of a Descriptive or Historical Study</u>

- A. Title of proposed thesis
- B. Statement of purpose(s)
- C. Stated Hypothesis/Research Questions
- D. Relationship of study to related research and analysis of pertinent research (literature review)
- E. Statement of need
- F. Proposed chapter development with major subheadings
- G. Limitations of your project (limiting factors which affect study)
- H. Beginning Bibliography

For those doing a descriptive or historical thesis, you will follow your statements of purpose and need with a preliminary description of the chapters of the thesis, identifying major subheadings (*F*).

Thesis Style Requirements

In Chapter 4, you will find style requirements of individual departments. However, the School of Graduate Studies also has certain style guidelines that govern: (a) the cover pages of the thesis and thesis abstract, (b) margins, (c) paper quality, and (d) the biographical note. These requirements assure that your thesis is submitted in a format that is suitable for binding and retention in the university library. There are also guidelines for submission of electronic versions of your thesis.

Thesis Cover Page

The format of the thesis cover page is shown on the Master's Thesis forms webpage.

Abstract Cover Page

Each thesis must include a 200-300 word abstract that summarizes the purpose, methodology, findings and conclusions of the study. The format of the cover page for the abstract is shown on the Master's Thesis forms webpage.

Guidelines for Writing an Abstract

An abstract serves as a summary of the thesis. It should contain the following elements: (1) a summary of the study's purpose or hypothesis; (2) brief statements regarding the methods of investigation; (3) a description of the results, including where and how you obtained them; and (4) conclusions and/or recommendations, which relate back to the original problem or hypothesis. When writing an abstract, it is important to be exact, concise, and unambiguous. The abstract should be written with approximately 200-300 words or from one to two pages. An example of a thesis abstract is provided on the Master's Thesis forms webpage. Examples are also found in the Elihu Buritt Library's Digital Repository (http://content.library.ccsu.edu).

Margins, Font, and Spacing

Since the original copy of the thesis will be bound, the <u>left margin should be at least one and one-half inches</u>. Check the style guide that you are following for top and bottom margins as well as the line spacing, which should be <u>double-spaced</u>. Do not use 3-hole punch paper and <u>no double-sided printing</u>. All theses submitted should be in size 12, Times New Roman font.

Biographical Note

You should include a short biographical statement as the last page of your thesis. An example is provided on the Master's Thesis forms webpage. At minimum, you may summarize your academic background, honors, and pertinent employment history. Additional information—about your family, your interests, and your long-term goals—is welcome and acceptable.

Policies Regarding Submission and Approval of Thesis

Central Connecticut State University follows certain procedures regarding approval of theses (see below). Individual departments may set additional criteria. (See Chapter 4)

After your thesis has been approved by your thesis committee, the chair of the committee must submit multiple copies of the thesis and abstract, along with a <u>Final Capstone Submission</u> form signed by all members of the thesis committee, to the Dean, School of Graduate Studies or designee.

The following should be submitted to The School of Graduate Studies:

- 1. The original thesis and abstract.
- 2. A USB flash drive containing an electronic version of the thesis and abstract.
- 3. Elihu Burritt Library Public Access Approval Form (See Elihu Burritt Library Thesis Access Approval).
- 4. Final Capstone Submission Form

The thesis should be bound by means of a clamp-style binder or larger binder clip (in which case it should be placed in a labeled envelope). If it is 100 pages or more, you may use an accordion style folder. Students should **NOT use ring binders** or any other means that would create perforations to the thesis; these will not be accepted.

Digitized/Electronic Submission

Students completing theses are required to submit a copy of their thesis in digital format. The specific procedures are explained below. Both the digital copy and the signed Thesis Access Approval Form (Elihu Burritt Library Thesis Access Approval) should be submitted to the School of Graduate Studies at the same time you submit your thesis.

The world of scholarship depends on people making their research available to others. Consequently, Elihu Burritt Library maintains a digital repository of over 1600 CCSU theses. There has been an increase in interest in our theses since this repository went live. This sharing of information stimulates education and research. It also ensures that many people give credit to you for your work and that your research may be cited in others' publications, which adds to your work's prestige and can help your future advancement.

Since you spent a great deal of time on your research, it should encourage you to know that others are requesting access to your work. Your literature review may guide others, and your results may save others the time of replicating your study; instead they can build on your research study. It would greatly aid graduate education if as many of these were made available as possible, either through Interlibrary Loan or accessible full-text through the University's digital repository.

In order to preserve your University Thesis in a digital format, the Graduate School **requires that you submit a copy of your thesis in digital format.** Once submitted, and if permission is granted, your thesis will be converted to a format suitable for access via the Internet. Only with

permission does the library make your thesis available digitally to users outside of authorized members of the CCSU community. You and your thesis advisor must sign the form (Elihu Burritt Library Thesis Access Approval). Internet users will be able to access your thesis once permission is provided.

Guidelines and Specifications for Submitting Your Thesis in Digital Format:

The library can accept a digital copy of your thesis in one of several formats. In most cases the original word processing format used to write the thesis is acceptable without modification. Current or recent versions of Microsoft Word, or Portable Document Format (PDF) are acceptable. Theses should be submitted as a single file, with all tables, charts or graphics positioned within the document.

Computer files may be submitted on a USB flash drive. Free drives are available at the library circulation desk.

If your thesis was produced using very old, or unusual word-processing or editing software, or if you require assistance converting your document for submission, please contact the Library Information Systems and Resources (ISAR) Office at 860-832-2079. In most cases, the library staff should be able to help you convert your thesis into a format acceptable for submission.

Please refer to the Elihu Burritt Library Thesis Access Approval Form. Complete the form and attach it along with your Final Capstone Submission Form.

Capstone Rubric

The Graduate Studies Committee has developed and approved a capstone rubric. The rubric provides specific areas that all theses should contain and indicates levels by which theses will be assessed by committee members.

Bound Personal Copy of Thesis

As a service to our students, Elihu Burritt Library provides the option to have up to two personal copies of a Master's Thesis bound professionally. Bound personal copies of theses are \$20.00 each. Students must provide their own print copies of their theses for binding. Requests submitted without the appropriate number of print copies will not be processed. Due to the large number of theses that must be processed each semester as well as the library's policy of not sending bindery shipments during the summer break, the turnaround time for students to receive bound personal copies of their theses can be between two and six months. To obtain bound copies of your thesis, please complete the Bound Personal Copy of Thesis Request and submit to the School of Graduate Studies with the final submission of your Thesis.

FINAL THESIS SUBMISSION CHECKLIST

LEFT MARGIN MUST BE 1 ½ INCH
FINAL CAPSTONE SUBMISSION FORM
IRB OR IACUC APPROVAL FORMS, AS APPROPRIATE
LIBRARY ACCESS FORM
DIGITIZED COPY
ORIGINAL VERSION

Thesis Deadlines

Students should work with their thesis advisor to set deadlines which allow time for internal requirements (defense, other readers, etc.) and also provide time to meet the School of Graduate Studies requirements below.

For participation in the May Commencement ceremony, <u>Final</u> copies of the approved thesis, abstracts, digitized/electronic copy, and signed approval form must be submitted to the School of Graduate Studies by <u>April 11</u> in order to have your thesis included in the Commencement Booklet. For participation in the December Commencement, <u>Final</u> copies of the approved thesis, abstracts, digitized/electronic copy, and signed approval form must be submitted to the School of Graduate Studies by <u>November 8</u>. If deadlines are missed for inclusion in the commencement booklet, students may still submit their thesis until the final examination deadlines for the Fall and Spring semesters. The deadlines for students submitting their thesis in the summer is <u>August 15</u>. The School of Graduate Studies must review and approve your thesis. You will be notified in writing, usually within two weeks, that your thesis has been accepted. If any changes are required, you will be informed of the actions you must take before final approval.

Chapter 4

Specific Department Requirements

Beyond the aforementioned School of Graduate Studies requirements, individual departments may set additional criteria and/or policies regarding thesis work. This chapter lists these specific departmental criteria.

Departmental thesis requirements may include committee size and/or composition, style, format, and evaluation process, such as an oral defense of thesis. Table 4-1 presents a summary of these requirements.

Some departments have also selected outstanding theses to serve as examples for students (see Table 4-2). Copies of all theses written by graduate students at Central Connecticut State University are available in Elihu Burritt Library. (Theses completed from spring 1997 onward are available through the Library's Digital Repository (http://content.library.ccsu.edu), provided students have given permission.

Note: Some programs do not offer the completion of a thesis as a capstone option. Students should refer to the Graduate Catalog or contact the department to discuss capstone options for completing the Master's degree. The School of Graduate Studies has a separate Handbook for the Special Project capstone, Plan C or E. Guidelines have also been established for Plan B, the comprehensive examination.

Table 4-1
Department Requirements

Department	Program	Committee Size (minimum of 2 required)	Committee Membership	Style Format	Dept. Chair Signature	Other Requirements
Art	MS Art Education (Art 599)	3	Must be graduate advisors at CCSU	APA or MLA depending on thesis type	Yes	
Biological Sciences	MA Biology: Ecology & Environmental MA Biology: Global Sustainability (BIO 599) MS Biology: General MS Biology: Health MS Biology Sciences: Wild Life & Conservation	3	Thesis advisor and a minimum of two other members	See Dept. for Guidelines	No	Oral Defense and requires Chair's signature.
Biomolecular Science	MS Biomolecular Sciences (BMS 599)	3	Thesis advisor and two full-time faculty "readers."	See Dept. for guidelines	No	Oral Defense (public & committee)
Communication	MS Strategic Communication (COMM 599)	3	At least 2 dept. members with terminal degree	APA	No	Oral Defense
Counseling and Family Therapy	MS Counselor Education: Professional, School, Higher Education MS Marriage & Family Therapy (CNSL 599)	2	One of whom must be a full time faculty member in department	APA	Yes	Oral Presentation
Criminology/ Criminal Justice	MS Criminal Justice (CJ 599)	2	Thesis advisor and reader approved by thesis advisor	APA	No	Oral Defense
English	MA English (ENG 599)	2	Must be members of the department	MLA	Yes	Public Presentation to faculty and students in the program
English	MS TESOL (LING 599)	2	Must be members of the department	APA	Yes	Public Presentation to faculty and students in the program
Geography	MS Geography (GEO 599)	2	Must be members of the department	Chicago	No	Oral defense
History	MA History (HIST 599)	2	Must be members of the department. Depending on topic, committee may include member outside of dept. or university	Chicago	Yes	Thesis Option- not available for MA Public History Students.
International and Area Studies	MS International Studies (IS 599)	2	Full-time faculty teaching courses related to IS program	APA, MLA, or Chicago	No	

Table 4-1 (continued) Department Requirements

Department	Program	Committee Size (minimum of 2 required)	Committee Membership	Style Format	Dept. Chair Signature	Other Requirements
Literacy, Elementary, & Early Childhood Education	MS Reading & Language Arts (RDG 599)	2-3	Full-time faculty	APA	No	
Manufacturing & Construction Management	MS Technology Management (TM 599)	2	Advisor and at least one more faculty member	APA	Yes	Public presentation to faculty and students in the program
Mathematics	MA Mathematics MS Mathematics (MATH 599)	2-3	At least 2 must be full time members of the department	APA	Yes	Oral defense may be required
Mathematics	MS Data Mining (DATA 599)					
Modern Languages	MA Modern Language (SPAN 599) (ITAL 599)	2-3	Committee size and membership depends on topic	MLA	No	
Music	MS Music Education (MUS 599)	2	Full time faculty	APA	Yes	
Physical Education & Human Performance	MS Physical Education (PE 599)	3	Full time faculty May have one from outside dept.	APA	Only if on committee	Oral presentation to faculty and graduate students
Psychological Science	MA Psychology (PSY 599)	3	Chair must be full-time Ph.D.	APA	No	Oral Defense

Table 4-2 Examples of Outstanding Theses

A .1	•
Anactha	C10
Anesthe	Sia

Kelly, Barbie (2003)

A Comparison of Ondansetron and Dolasetron in the Prevention and Treatment of Postoperative Nausea and Vomiting in Outpatient Anesthesia

<u>Art</u>

Fogarty, Michelle L. (2002)

The Artistically Talented: Modifications in the Middle School Art Room

Biology

Costello, Chris (2014)

The Limnological Dynamics of a Small Urban Lake, Batterson Park Pond,

Connecticut

Hall, Robyn (2014)

Chemical and Biological Water Quality Assessment of Clear Brook and the Nepaug River Tributaries to the Metropolitan District Commission's

(MDC) Nepaug Drinking Water Reservoir in New Hartford, CT

Biomolecular Sciences

Banda, Erin (2010)

Identification of the First Differentiation Event Involved in Human Embryonic Stem Cell-Derived Neural Lineage Specification

Damiano, Jeff (2007)

The Role of E-Cadherin in Parietal Endoderm Outgrowth Migration

Ferrazzoli, Alexander (2007)

Vesicular Packaging of Serotonin by Astrocytes

Communication

Wnuk, David J.

Neutralizing the Effect of Organizational Structure Has On

(2004)

Communication Through the Implementation of Strategic Communication

Hadden, Jackie

A Pilot Study of the Relationship Between Competitive Athletic

(2003)

Participation and Transformational Leadership Ability: A Communication

Perspective

Riley, Shannon

(2002)

Network Ties as a Predictor of Realistic Job Previews

Table 4-2 (cont'd) Examples of Outstanding Theses

\sim .	•	1	
(rin	กาก	$\alpha I \alpha$	MI
Crin		OIL	JY V

Curreri, Shawn J. (2014)

A Comparative Analysis of Occupational Stress and Workplace Violence

Dubiel, David M. (2008)

Police Fears of Liability: An Omnipresent Threat?

English

Loucks, Jessica (2009)

The Nature of Nurture: Fluids as Indicators of Naturalness in Macbeth

Elterich, Geoff (2007)

Taratino: Exposing the Spectacle of the Postmodern Condition

History

Gartner, David (2003)

The Failed Promise Of Good Roads

<u>International Studies</u>

Lukens, David (2014)

Critical Perspectives on Redevelopment and Gentrification-Induced Displacement in Seoul: A Case Study of Guryong Village as a

Migration Destination

Modern Languages

McCarthy, Brian

(2007)

Serpents in the Desert: Soteriological Pharmaka or Ambivalences in the Christian Doctrine of Salvation in the Mythological Drama of

Calderon

Kremens, Elzbieta

(2005)

La Presencia Morisca en Don Quijote: Cercantes y Su Vision Sobre

Esta Minoria Marginada

Werstler, Jessica

(2002)

Total Physical Response Storytelling: A Study in Actively Engaging

Students Across the Modalities

Table 4-2 (cont'd) **Examples of Outstanding Theses**

Music

Dickson, Rob Applying the Adornian Concept of Listening Regression to the

Significance of Violence in Contemporary Music (2007)

Physical Educaton & **Human Perfomance**

Keithan, Christopher Effect of Motivational Music on Physical Activity Levels of

(2010)Second Grade Physical Education Students

Failla, Michelle Perceptions of Weight Training in Division 1:

(2006)Collegiate Male and Female Soccer Players.

Psychological Science

Davis, William J. Alcohol Use in College Students: Testing the Self-Medication (2015)

Hypothesis Applying Pooled Time Series Cross-Section Analysis

Corbeil, Candace C. Personality and Risky Sexual Behaviors: The Role of Alcohol Use

(2014)among African American Young Adults

Skierkowski, Dorothy Text messaging and dependence in college students: Social process

or pathology? (2013)

TESOL

(2009)

Bennett, Scott Socio-emotional and Task Based Communication in Massively

Multiplayer Online Role Playing Games (MMORPGs) Revisited:

An Account of Non-native Speaker Discourse.

References

- American Chemical Society (1986). *The ACS style guide: A manual for authors and editors*. Washington, DC: ACS.
- American Psychological Association (2001). *Publication Manual of the American Psychological Association* (5th Ed.). Washington, DC: Author.
- Cone, J., & Foster, S. (1997). *Dissertations and theses from start to finish*. Washington, DC: American Psychological Association.
- Council of Biology Editors Style Manual Committee. (1994). *Scientific style and format: The CBE manual for authors, editors and publishers* (6th Ed.). Cambridge: Cambridge University Press.
- Gibaldi, J. (1998). *The MLA style manual and guide to scholarly publishing*. New York: The Modern Language Association of America.
- Krathwohl, D. (1988). How to prepare a research proposal: Guidelines for funding and dissertations in the social and behavioral sciences. Syracuse, NY: Syracuse University Press.
- Lincoln, Y., & Guba, E. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.
- Rudestam, K., & Newton, R. (1992). Surviving your dissertation. Newbury Park, CA: Sage.
- Slade, C., Campbell, W., & Ballou, S. (1994) Form and style: Research papers, reports, thesis. (9th Ed.). Boston: Houghton Mifflin.
- Thomas, R.M., (2003) Blending Qualitative and Quantitative Research Methods in Theses and Dissertations. Thousand Oaks, CA: Corwin Press, Inc.
- Wallen, N. and Fraenkel, J. (2001). Educational Research: A guide to the process (2nd Ed.). New Jersey: Lawrence Erlbaum Associates.
- University of Chicago Press. (1982). *The Chicago manual of style: For authors, editors and copywriters* (13th Ed.). Chicago: University of Chicago Press.