CHATHAM UNIVERSITY

LANDSCAPE ARCHITECTURE PROGRAMS

GUIDELINES FOR PREPARING A RESEARCH THESIS

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF LANDSCAPE ARCHITECTURE OR MASTER OF LANDSCAPE DESIGN AND
DEVELOPMENT

PITTSBURGH, PENNSYLVANIA

AUGUST, 2011

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SECTION ONE: ADMINISTRATIVE GUIDELINES

This guide is issued by the Landscape Architecture Programs at Chatham University. The purpose of the guide is to assist students in the preparation of their research thesis manuscript which, in addition to the required coursework, partially fulfills the MLA degree requirements. MLA students who are pursuing an applied thesis option must refer to the other publication titled: "Guidelines for Preparing an Applied Thesis," which has been released by the Landscape Architecture Programs at Chatham University in January, 2011.

A research thesis should represent the culmination of the graduate student's knowledge and skills of the field of landscape design, planning, and management, and should be a product that can be shared with prospective employers and peers as an example of her/his specialized professional interest, unique knowledge, and/or contribution to the world of ideas in landscape architecture.

1.1 Definition of Terms

There are two existing thesis options within the MLA program. The first option is a research thesis and the second option is an applied thesis. This manual deals only with the first category, while the applied thesis is covered in a separate manual.

A research thesis is generally defined as an in-depth study that aims at the advancement of the field of landscape architecture through:

> 1. Preparing a research that generates new knowledge, or
> 2. Conducting a scholarly study that organizes, classifies, analyses, improves, and/or evaluates existing knowledge.

1.2 Registration

Students must be enrolled for thesis credits during every semester that he/she is interacting with the thesis committee to complete their research thesis. The course titled LAR695: MLA Thesis has a minimum of six credits, and a maximum of nine credits. These six to nine credits are offered incrementally according to an agreement with the thesis advisor (e.g. 1, 2, 3, 4, etc. credits a semester). This decision must be pre-approved by the chair of the thesis committee. Thesis coursework is still subject to the five-year limit to complete all degree requirements as set by the College for Graduate Studies.

1.3 Selecting a Research Topic

There are at least two ways to decide on the right topic for your thesis. The first is to ask yourself what kind of work you are passionate about and want to specialize in after you graduate, then select a subject that lets you showcase your expertise in that specific area of landscape architecture. The second approach is to ask yourself and others about the various topics that the job market currently needs or will need in the future.

1.4 Research Thesis Proposal

The thesis proposal is a fundamental first step in the research thesis development. Consequently, students cannot register for Thesis credits without having an accepted proposal at the start of the semester.

Students may work with their assigned academic advisor at the beginning of the thesis process. During this time, students must develop a proposal that includes all sections and elements outlined in Table 1 below. When completed, the faculty advisor will present the proposal at the next LAR faculty meeting for review. If approved by the faculty, students should use this document to select a chair of their thesis committee, who will advise the student in all aspects (including the recruitment of other committee members). The chair of the thesis committee can change, and does not need to be the same faculty member that was guiding the development of the proposal.

The research thesis proposal should be a concise document that defines your topic, identifies a research question, lists the relevant literature, and details the proposed process. It will be reviewed and discussed by all faculty members in the Landscape Architecture Programs in order to assess both the suitability of the topic and your degree of preparation for research thesis development. This proposal typically ranges from three to five pages in length and should generally conform to the structure outlined below in Table 1.

Table (1): **Research Thesis Proposal Guidelines**

1. **Introduction**
   a. What is the objective of the study?
   b. Why is this issue significant and/or related to the profession of Landscape Architecture?
   c. How does your exploration of the existing knowledge on the topic suggest gaps, distortions, or questions that exist, and warrant further investigation?
2. **Research Questions**
   a. What is the primary research question?
   b. What are the secondary research question(s)?
3. **Research Approach**
   a. What are the typical research methods used by other investigators who have asked similar research questions?
   b. What research methods will you use and what are the documented sources of the methodology?
   c. What type of data will you be collecting?
4. **Preliminary Table of Contents**
5. **Proposed Timeline for Completion of Work**
   a. What is the proposed timeline and research schedule?
   b. When will you start collecting the data?
   c. When will you start your analysis of the data?
   d. When will the introduction, literature review, and methods sections be completed?
   e. When will you complete the analysis and conclusions chapters?
6. **Final Product:**
   a. What are the expected products?
   b. When will be the proposed defense day?
   c. What University deadlines must be met?
7. **References**
   a. Annotated bibliography: A brief list of scholarly sources that have asked similar research questions and addressed relevant topics.
   b. Bibliography: A full list of potential library sources and specialized people related to your topic and the selected research method.

1.5 Review by the Institutional Review Board (IRB)

All research proposals that involve human subjects must be submitted for review by the Institutional Review Board (IRB). According to the Chatham University website, "*the purpose of the Chatham IRB is to ensure that the health, well-being, and rights of human subjects are protected, as researched by members of the Chatham University Community.*"

This step is essential in accordance with federal law as mandated through the Department of Health and Human Services (DHHS). It ensures that risks to participants are minimized, the selection of participants is equitable, and participants are informed fully of what their participation will entail.

Any student using human subjects will be required to receive certified training from the IRB via Chatham University's online institutional Review Board system, eIRB. Additionally, student proposals and interview protocol must be submitted to and approved by the University IRB Board. IRB submission forms must be reviewed and signed by the thesis chair. To access the Chatham University eIRB, students must establish an account via the eIRB link on my Chatham: http://my.chatham.edu/irb/index.cfm

1.6 Forming a Committee

It is helpful to identify a thesis topic that is related to the research interests or professional experience of a faculty member on Chatham campus or other research and academic institutions in Pittsburgh Metro Area. If the thesis topic is outside the expertise of the faculty, you will be encouraged to identify an outside expert to serve on your committee.

Your committee must be comprised of one full-time faculty member from the Landscape Architecture Program as the chair of the thesis committee and a minimum of one additional member. The additional committee member should provide specialized focus related to your selected topic, and normally will have an advanced degree or can bring a unique expertise to the team. All members must be approved by the LAR Program Director.

Generally, the chair of the committee will work directly with the student. The additional committee member may act as a specialized consultant, a reader, or, in rare occasions, as co-chair. All committee members

are responsible for the level of scholarship exhibited in the thesis. In addition, it is the responsibility of all committee members to ensure that the thesis is well-written and that it is carefully proofed. At the discretion of the thesis committee, a student may be directed to the PACE Center at Chatham University for professional tutoring in writing.

1.7 Thesis Procedure

In the first stage of enrollment in LAR 695: MLA Thesis courses (3 – 4 credits), a student is normally expected to complete the review of the related literature, finalize the chapter on methodology, and undertake the collection of most of the needed research data. The specific tasks that justify the number of credits should be spelled out and agreed upon in a written contract with the chair of the thesis committee. In addition to regular meetings with their committee, students will be expected to present their progress to the chair of the committee (and possibly the members as well) at the end of each semester. It is essential that the MLA candidate hand in the final manuscript of the chapters completed during the term at least two weeks prior to exam week of the semester. Following this submission, the chair of the committee will assign a final grade (A, B, C, etc.), based on the candidate's fulfillments of the written contract. The details of these intermediate submissions and the products that are expected may be discussed and approved by the committee members.

During the final semester in which you intend to graduate, the first complete draft of the thesis should be submitted to your committee by the middle of the term. Following your submission, you will receive comments from your committee, make any suggested revisions, and resubmit a second draft prior to the defense.

The grading process will include an assessment of the student's ability to meet deadlines outlined in the semester's contract. A student that has not appropriately satisfied the specific requirements of her/his contract, i.e. acceptable drafts of the required chapters and/or final manuscripts, will not be granted a passing grade in that course.

At Chatham, students can withdraw from any course up to week ten without academic penalties. It is therefore suggested that students should meet with their committee prior to week nine of the semester to assess the strength of their thesis work during the semester.

Typically, students should complete the data analysis and conclusion chapters in the last stage, leaving the introduction and abstract sections as the last writing tasks since they will include information related to the overall research process, analysis and findings.

Finally, the research thesis must be documented in a standard thesis format. Specific writing guidelines are outlined in Section II. All final product requirements should be discussed and approved by the committee.

1.8 Thesis Writing

Using the proposed chapter outline as a guide, the student should work closely with the thesis chair during the thesis writing stage. The thesis chair and student should decide on a timeframe for submitting chapter drafts and making revisions. The student should consult with the chair of the thesis committee about when to involve the other members of the committee, and the chair will determine the appropriate schedule for meeting dates and times. Students are required to submit material to the members of the committee at least two weeks prior to any meeting or review at each stage of the process. It is highly recommended that both the Introduction chapter and the abstract be written last. A good abstract should be:

- Appropriate in tone, structure, and length
- Fully descriptive of the study.
- Identifies the problem, subjects, methods, findings, and conclusions of the study.

1.9 Thesis Defense Presentation

Significance of the Defense Presentation

All students are required to present orally and defend their thesis in a meeting that is advertised and open to the Chatham community and to the public. The date of the defense must be set at least one month in advance, and must be scheduled ten full days before the last day of classes for the term in which the student is enrolled. Students should allow sufficient time between the defense and the final submission of the thesis for revisions. After a student has successfully defended a thesis, the committee must sign the second portion of the thesis report form.

The thesis defense is an occasion that serves several purposes:

- o It is a formal and official test of the graduate student's scholarship, the major advisor's guidance, the thesis committee's effectiveness, and the LAR Program's ability to help a new generation of researchers.
- o It is an educational forum to share new knowledge, compare notes about the new frontiers of the field, and debate and reflect on its future.
- o It is an occasion for the Chatham University community and the candidate to celebrate their contribution to the landscape architecture reservoir of knowledge.

Organization of the Defense Presentation

A full, complete, polished and copy-edited text with full scholarly apparatus and images must be handed to every member of the thesis committee two weeks before the defense. Each member of the committee must be physically present. Normally, the Thesis Defense is comprised of the following activities:

1. Introduction by the major advisor of the candidate and the members of the thesis committee;
2. Presentation of the research process and product by the candidate;
3. Question and answer session by the committee members;
4. Question and answer session by the audience;
5. Comments and suggestions by the committee members;
6. Comments and suggestions by the audience;
7. Final remarks and recap by the candidate;
8. Adjournment of the public meeting;
9. Private thesis committee meeting to deliberate the results of the submitted thesis and assess the oral defense presentation; and
10. A private meeting between the committee and the candidate to discuss the final grade decided upon by the committee.

1.10 Proposed Schedule

Summer – Third Year
1. Enroll in Seminar III (LAR663: Thesis Preparation)
2. Develop a research thesis proposal
3. Acquire approval of the thesis proposal and agree with a faculty member to chair your committee.

Fall – Third Year
1. Register for LAR 695 after developing a contract with your advisor that outlines expectations, products, and justifies the number of credits needed
2. Agree with your thesis chair on nominating other members of the committee
3. Apply for graduation with the registrar's office (May Graduation or December Graduation)
4. Complete the Review of the Literature and Methodology Section by mid- December

Spring – Third Year
1. Register for LAR 695 after developing a contract with your advisor that outlines expected products and justifies the number of credits needed.
2. Write the rough draft of the chapter(s).
3. Synthesize discussion into points, highlights, and summary.
4. Hand completed 1st draft to your advisor.
5. Revise your first draft based on feedback.
6. Prepare illustrative tables, annexes, and graphics.
7. Ensure the quality control, technical accuracy, and text verification
8. Coordinate the text and cross-reference the parts.
9. Hand a complete 2nd draft to committee members.
10. Revise 2nd draft based on committee's feedback.
11. Hand in final draft to all committee members two weeks before defense date.
12. Create a Powerpoint presentation and defend your final thesis.
    - The Defense must be completed 10 days before the last day of classes
    - Permission to defend must be approved by all committee members
13. Complete any suggested revisions and/or corrections.
14. Submit the final thesis 5 days before final grades are due

1.11 ASLA Student Awards

Each year, the ASLA Student Awards honor excellent student research from across the country and

abroad. A strong research thesis has the added benefit of potentially being submitted for this competition. Please

review the past student award winners to acquaint yourself with the diversity of topics and the national quality

expected. This resource could also be used to gauge the academic expectations for applied theses.

http://www.asla.org/2010studentawards/index.html

1.12 Determining a Thesis Title

A successful selection of a title for your thesis is essential to the future readers. The title should make the task of finding your study easy and effective. The criteria of a good title are listed below:

- Is appropriate in tone, structure, and length (approximately 10 words) to landscape architecture journals.
- Is fully explanatory of the study.
- Identifies actual variables or theoretical issues of the study.

SECTION TWO: WRITING GUIDELINES

Using the chapter outline as a guide, the student must document the research process, findings and the resulting recommendations. The documentation of the study should not be "pushed-off" until the end of the last semester. Rather, documentation should be incorporated throughout every phase of the research process. The chair of the thesis committee should decide on a timeframe for submitting chapter drafts and making revisions. All technical writing guidelines are subject to the review, approval, and discretion of the chair.

2.1 Typical Chapter Outline:

1. Chapter 1: Introduction
   a. What is the primary research question
   b. What research methodology did you use?
   c. What type of data did you collect?
   d. How did you analyze the data?
   e. What did the data analysis show?
   f. What are your general conclusions regarding the question that you explored through your research and analysis
2. Chapter 2: Literature Review
   a. What does the existing research on the topic tell us?
   b. What are the significant studies and findings related to the topic?
   c. What existing knowledge was most relevant to your question and how did it affect the direction of your research?
3. Chapter 3: Methods
   a. Research Planning: What method you ought to use
   b. Research Design & Management: How and when to conduct your research process
4. Chapter 4:Analysis and Findings
   a. Collecting, classifying, and assessing the data
5. Conclusion
   a. Putting together what you took apart
   b. Summary, reflections, and ideas for the future

2.2 Manuscript Submission

The final thesis must be submitted at least five days before final grades are due. Check with your thesis advisor to confirm the final submission deadline. The final draft of the research thesis must be signed by all committee members on the submission page (see Appendix A). Also, the thesis report form must be signed by all committee members and placed in the student's file.

2.3 Graduate College Requirements

The College of Graduate Studies at Chatham University has specific paper and binding requirements. Thus, consult the library and copy center before printing the final text.

Graduate students are required to submit both a printed copy and an electronic copy of their thesis to the JKM Library. In addition, you will be required to submit bound copies of your thesis to the Graduate Program Director and to your thesis advisor. The Graduate Program Director will then make sure the Landscape Architecture Reading Room gets one of the bound copies.

2.4 Requirements for Submitting an Electronic Copy

You can submit an electronic copy of your thesis to the library through an upload option in Moodle. Simply log in to Moodle, click on J.K.M. Library Technical Services, click on Tutorial – Thesis – Capstone (Library e-copy), and then submit your electronic copy by uploading the file. You can also use this link to get there directly: http://moodle.chatham.edu/mod/assignment/view.php?id=56725 If your thesis is too large to upload, or you have any difficulty with this process, please contact Dan Nolting at dnolting@chatham.edu.

2.5 Graphic Requirements

All graphics such as photographs, tables and graphs should be of a high quality and should also be incorporated directly into the body of the text as illustrations. Large graphics may need to be reduced in size to meet the typical 8.5" x 11" format. However, the resolution of the illustration must remain a minimum of 300 dpi.

2.6 Technical Writing Requirements

The appendix of the Turabian Manual has suggested format and submission guidelines. These guidelines should be used as a supplement to the style and formatting requirements outlined here. The specific guidelines of this program take precedent over any guidelines suggested by the Turabian and/or Chicago manual.

2.7 Formatting & Style Guides

The "Turabian Manual for Writers" (Turabian et al. 2007) is the accepted style guide for a thesis for a Master of Landscape Architecture thesis at Chatham University. The Turabian Manual presents a concise guide

to the Chicago Manual of Style, 15th edition. However, specific formatting requirements in this guide take precedence over either style manual.

Students should first reference the seventh edition of "A Manual for Writers of Research Papers, Theses, and Dissertations" (Turabian, et. Al. 2007). The Chicago Manual of Style published by the University of Chicago Press can be used as a supplemental reference when any formatting, grammatical or citation issues are not covered in the Turabian Manual.

2.8. Citation Style & Requirements

There are two citation styles accepted by the Chicago Manual of Style, and, by default, the Turabian Manual for Writers. Students must use the Parenthetical Citations-Reference List Style as presented in the Chicago Manual and covered by the Turabian text. This style is also known as the author-date style because these are the critical elements used for identifying sources. Typically, scholarly references will include three components: parenthetical citations in the body of the text, endnotes found at the end of each chapter, and a complete reference list found at the end of the text.

All sources must be cited in the documentation of the thesis and on any final presentation boards during the oral defense. Below are the specific requirements regarding when to include a source citation in your thesis and what information must be included in the citation. The Turabian Manual should be consulted for additional Parenthetical Citations guidelines.

1. When you *paraphrase ideas* that are associated with a specific source, even if you are not directly quoting the source – use a parenthetical citation (author, date)
2. When you want to *point readers* to a source but have not quoted or paraphrased the source – use a parenthetical citation (author, date)
3. When you *discuss a specific idea, data, or method* attributed to any source, even if you are not directly quoting the source – use a parenthetical citation with the page number from the source (author, date, page number)
4. When you *quote exact words* from a source – use a parenthetical citation with the page number from the source (author, date, page number)
5. When you quote *multiple sentences* from a source – use a block quote with parenthetical citation and page number typically located outside the punctuation (author, date, page number)
6. If you wish to make substantive comments on your text or an associated source, use endnotes instead of parenthetical citations.

2.8.2 The use of endnotes

For substantive comments related to your text that are not necessary to include within the body of the text, use endnotes located at the end of each chapter. Do not use footnotes. The Turabian manual should be referenced regarding the formatting and placement of such notes.

In general, endnotes can be helpful to cite specific pages and complete reference information of sources you are directly quoting or pulling significant ideas from. Endnotes can also be used to expand on an idea that might not be specific to the topic of the paragraph. In both cases, an endnote can more immediately direct the reader to your sources because it is located at the end of the chapter and not buried in the extensive reference list located at the end of your text.

2.8.3 Reference list

As mentioned previously, a reference list must be included at the end of your final chapter. The reference list presents full bibliographic information for all the sources you cited with parenthetical citations. You may also include significant sources related to your topic that were not specifically cited in the text. The Turabian manual should be referenced for the formatting and arrangement of all references

2.9 Margins and Spacing

The margin on the left side of the paper must be 1-1/2 inches. Top, bottom, and right margins should be 1 inch. Double-space all text with the exception of block quotations, table titles, figure captions, endnotes, and reference lists. These exceptions should be single-spaced.

2.10 Typeface

All type in the body of the text should be Times New Roman and twelve-point font. All titles are twelve-point Times New Roman font in small-capitalization. All headings and sub-headings are twelve-point Times New Roman font with the specified level distinctions (see text). All endnotes, table titles and figure captions should be ten-point Arial font.

2.11 Pagination

All front matter (title page, copyright notice, acknowledgements, table of contents, list of tables, list of figures, abstract) except the submission page are counted in lowercase roman numerals (i, ii, iii, iv, etc.). The page number on the title page is not shown thus, the first visible page number should be (ii) on the copyright notice page. (See Appendix B)

Main text pages and back matter (appendices, reference list) are counted in Arabic numerals (1, 2, 3, etc.). All page numbers should be placed in the center of the footer ½" from the bottom. All page numbers should be ten-point Arial font.

2.12 Front Matter

Front matter includes all information and required pages that precede the body of the text. The front matter must fulfill the requirements listed below.

2.12.1 Submission page

All theses must include a submission page as the first page of the document. The submission page is not counted in pagination of the front matter. The submission page must include the title of the thesis, the required text and signature space as formatted and depicted in Appendix A.

2.12.2 Title page and copyright notice

All title pages should be twelve-point, Times New Roman font with small capitalization. The title itself is set in a bold typeface. The page number on the title page is not shown.

2.12.3 Abstract

All theses must include an abstract. The abstract should directly follow the copyright notice page and include the thesis title and your name. The abstract should be a maximum of 150 words and single-spaced with no spacing before or after each line.

2.12.4 Acknowledgements

The inclusion of an acknowledgment page is optional and generally follows the formatting guidelines of the abstract page. See appendix B as a reference. The typeface of the acknowledgements should be twelve-point, Times New Roman font.

2.12.5 Table of Contents

A table of contents does not list the pages that precede it but should include any front matter that follows it. The page is titled "Table of Contents" with small capitalization and twelve-point font. Two blank lines separate the page title and the first item listed. The remaining items are single-spaced with a blank line between each item (see Appendix B). The table of contents should list the first page of each chapter and any first level subheading. The subheadings should be indented ½ inch. There should be no leaders connecting the page number with each item. The Turabian Manual and appendix of this guide should be reference for additional formatting requirements.

2.12.6 List of illustrations

All tables and figures should be listed in the front matter following the table of contents. Use the same formatting as the table of contents, but divide the tables and figures into separate sections. All table and figures should be listed with double numeration where the first number equals the chapter and second refers to the sequential order (i.e. fig 1.3). See the appendix for specific formatting requirements.

2.13 Text

The text of the paper includes everything between the front and back matter. Chapter titles should be twelve-point Times New Roman font in small capitalization. The first paragraph should be separated by two spaces from the chapter title.

Up to three subheading levels are permitted. See Appendix C for the formatting requirement of each subheading level. Follow all other formatting requirements described in typeface section.

2.14 Back Matter and Illustrations

Typical back matter should include any appendices and the reference list. Illustrations should not be included in the back matter. All illustrations should be included in body of the text immediately following the first reference to the illustration.

Remember that each illustration must be titled and labeled with the appropriate page number.

The appendices and the reference list should be numbered with Arabic numerals consecutive to the final page of text. In general, the appendices and reference list should be single-space, twelve-point Times New Roman font. The second line of a single reference should be indented ½ inch (this is referred to as a "hanging indent" in Microsoft Word). All references should be separated by a single space. Consult the Turabian Manual for specific formatting requirements of Parenthetical-Reference List Style.

REFERENCES

Chatham Institutional Review Board. *eIRB system* [website] 2010 [cited 12/16/2010]. Available from
http://my.chatham.edu/irb/index.cfm

Turabian, Kate, Wayne Booth, Gregory Colomb, and Joseph Williams. 2007. *A manual for writers of research papers, theses, and dissertations; Chicago style for students and researchers*. 7th ed. Chicago, IL: The University of Chicago Press.

American Society of Landscape Architects. *ASLA Professional Practice Networks* [website] 2010 [cited 12/16/2010]. Available from http://www.asla.org/PPNLanding.aspx.

THESIS REPORT FORM

Student's Name:

Part 1: Proposal
The proposal has been reviewed and accepted by the student's supervisory committee.

Professor's Name, Title, and Program   Signature and Date

_____   _____
Chair

_____   _____
Reader

_____   _____
Reader

Part 2: Defense
The thesis has been orally presented to the supervisory committee and invited guests and successfully defended by the student.

Professor's Name, Title, and Program   Signature and Date

_____   _____
Chair

_____   _____
Reader

_____   _____
Reader

Part 3: Final Manuscript Submission
The thesis has been submitted to and approved by the supervisory committee as an acceptable standard of scholarly presentation for the degree of Master of Landscape Architecture.

Professor's Name, Title, and Program   Signature and Date

_____   _____
Chair

_____   _____
Reader

_____   _____
Reader
When all sections have been signed, the thesis report form must be submitted to the program director.