Capstone Proposals and Projects

Guidelines for the

Department of Geography Master of Science
Degree Program in the Department of Geography,

University of Denver
ABSTRACT

If this document were a Capstone Project, the abstract would be here. The Capstone Proposal does NOT have an abstract. The abstract would be no more than 120 words. This paragraph has 120 words. The abstract always follows the Title/Approval page. It is always numbered “Last Name-ii.” It is a single block paragraph. It is not indented. It is non-evaluative and mentions results, but it does not begin the discussion of those results. This paragraph has 120 words. This paragraph has 120 words. This paragraph has 120 words. This paragraph has 120 words. This paragraph has 120 words. This paragraph has 120 words. This paragraph has 120 words. This paragraph has 120 words. 120 words.
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INTRODUCTION

These Guidelines generally follow the Department of Geography Format and Style Requirements contained herein and *The Chicago Manual of Style*. Page ordering and numbering follow the Department of Geography Format and Style Requirements. The use of headings is an example that meets Chicago requirements. However, many other Chicago-compliant heading structures are possible.

**Important:** Please consult the Capstone Proposals and Projects Deadlines for each academic quarter.

**Purpose of the Capstone:**

The Capstone is the culminating academic endeavor of students who earn master’s degrees from the Department of Geography online master’s degree program, providing an opportunity to explore a problem or issue of personal or professional interest through focused study under the direction of a faculty member (i.e., the Capstone Advisor). The Capstone must demonstrate the student’s ability to apply the knowledge and skills acquired in the academic program to real-world issues and problems. This final academic activity must represent graduate-level work and must demonstrate competency in areas such as research, written communication, integrative and analytical thinking skills, and problem solving and decision-making ability. Capstones must contribute meaningfully to the student’s field.
**Types of Capstones:**

Research, applied, and creative Capstones are acceptable. The requirements for each category vary slightly and are explained later in these guidelines.

**Capstone Project Course:**

The master’s degree Capstone is four (4) quarter hours and comprises completion of a Capstone Proposal followed by the Capstone Project and Report.

**Goals:**

The overall goal of the Capstone is to provide the student with an opportunity to apply the knowledge and skills acquired in their courses to a specific problem, issue, or creative project.

Also, it will do some or all of the following:

- Extend academic experience into areas of personal interest, working with new ideas, issues, organizations, and individuals.
- Encourage and develop critical and creative thinking about academic, professional, or social issues and to further develop analytical and ethical leadership skills necessary to address and help solve these issues.
- Refine research skills and demonstrate proficiency in written and oral communication abilities.
- Result in an original creative work.

Every student should aim to make their Capstone Project:
• A unique solution to a problem or opportunity;
• Publishable;
• Marketable;
• Implementable; or
• An original creative endeavor (e.g., software or application development).

**WRITING THE CAPSTONE PROPOSAL**

The student will complete a Capstone Proposal prior to registering for the Capstone Project. Once the Capstone Proposal is approved, the student may register for the Capstone Project at the beginning of any quarter. The student should consult with his or her Academic Advisor who will verify degree status, accumulated hours, and eligibility to begin working on the Capstone Project.

The purpose of writing a Capstone Proposal is to facilitate deeper thinking and further refining the student’s idea with assistance from an expert in the student’s field. After completing the Capstone Proposal, the student will also have a better idea of how time will be spent on the Capstone Project itself.

The Capstone Advisor will help the student prepare a Capstone Proposal and complete the Capstone Project. The Capstone Advisor will guide the student through the completion of the Capstone Proposal wherein an idea for a Capstone Project is formally proposed. The Capstone Advisor will also ensure the student has a worthy topic for the Capstone Project, a
workable design, and a suitable initial vision of the final result of the Capstone Project.

**Selecting and Working with a Capstone Advisor:**

One of the most important things the student does in preparation for his or her Capstone Project is to enlist an approved member of the program’s faculty to serve as a mentor and guide through the process of writing the Capstone Proposal and the Capstone Project itself. The central role of the Capstone Advisor is to provide substantive, helpful guidance and feedback; the student should select someone who is familiar with the world of the Capstone topic and perhaps already familiar with the student. The student should have an initial idea of the topic of interest prior to selecting a Capstone Advisor and starting to write the Capstone Proposal.

Consult with the Online MSGISc Program Director, Steven Hick, for a list of approved Capstone Advisors. Once an approved faculty member agrees to serve as the Capstone Advisor, the following need to be worked out:

- **Frequency of contact:** The student and Capstone Advisor should develop a general plan for regular contact. This can be done with meetings, telephone calls, faxes, or emails.
- **Communication:** List specific contact preferences for the student and Capstone Advisor—home, work, fax, e-mail, etc. There should be at least two means of contacting the student and the Capstone Advisor.
• If problems arise: The student and Capstone Advisor should have a clear plan of how to address issues related to the Capstone Proposal, project, or professional interaction. They should develop a contingency plan for changes in the agreed-upon action plan or if disagreements arise about how the project is going.

• Begin working: The student should select and begin working with the chosen Capstone Advisor no later than the end of the 3rd week of the course quarter preceding the Capstone Project quarter. At this point, the student should refine his or her idea and begin to write the Capstone Proposal.

    The Capstone Proposal must be drafted, revised, and submitted for approval no later than one week prior to the registration deadline for the quarter in which the student intends to register for the Capstone Project. The student will then work with the Capstone Advisor to ensure that the student’s proposed topic is focused, viable, and engaging enough to sustain the student for ten weeks. In the Capstone Proposal, the student should outline a Capstone design, articulate an initial vision of what the Capstone might encompass, specify a final format, and delineate the timeline for completing the Capstone Project. Capstone Proposals are typically 1500-2500 words.

    For research and applied projects, the Capstone Proposal provides an outline and explanation of the parts in detail, which include:
Guidelines-6

- Thesis Statement: The thesis statement for the Capstone Project is the claim or assertion about the subject;
- Goals/Objectives: A statement of the goals or objectives of the Capstone Project and the anticipated benefits or significance;
- Literature review: A preliminary review of the literature that supports the rationale for the Capstone Project;
- Project Description: A complete description of the Capstone Project, including a work plan for meeting the objectives within the time frame, methods and procedures, rationale for the procedures, and a description of the final product; and
- Project Schedule: A schedule delineating the step-by-step sequence of tasks and when each will start and end.

For creative projects, the student, the Capstone Advisor, and the Academic Director should agree during the Capstone Proposal stage whether each of the following proposal elements is required and to what degree they should be developed in the student’s proposal:

- Creative Statement: The creative statement will capture the vision and intention for embarking on the project;
- Project Foundations: The project foundations section will provide justification for the proposed project and may include a discussion of some or all of the following, with appropriate support through research: themes and content, theoretical/critical contexts, supporting
material (including literature reviews), medium and/or literary format(s), anticipated audience;

- Desired Outcomes: The desired outcomes establish what the student expects to learn while creating this Project;
- Project Goals and Experience: The student relates previous coursework and experience to the proposed work;
- Project Schedule: The student will sketch a basic outline of the anticipated work flow and process stages; the student should also project a timeline along with the outline, estimating the time needed to complete each step.

Regardless of the type of a Capstone the student selects, during the Capstone Proposal phase the Capstone Advisor will:

- Provide feedback on the written Capstone Proposal.
- Discuss the requirements for the Capstone Project.
- Review the requirements and format of the Capstone Project.

**REGISTRATION FOR THE CAPSTONE PROJECT COURSE**

**Eligibility Requirements:**

The student may register for the Capstone Project only when he or she is fully accepted as a degree candidate, has completed a minimum of 32 quarter hours of his or her program, and has completed all core requirements with a cumulative GPA of 3.0 or better.
To register for the Capstone Project, the student must complete and submit the following:

- Capstone Proposal.
- IRB Class Project Approval Form. This form is contained within these Capstone Guidelines and is available at [http://www.du.edu/orsp/download/irb_application_eprotocol.pdf](http://www.du.edu/orsp/download/irb_application_eprotocol.pdf).

These materials should be submitted by email or fax. They must be submitted no later than one week before the registration deadline for the quarter in which the student intends to register.

**IRB Information for Capstone Students**

Students *must* fill out an IRB Class Project Approval form if their Capstone Project will include surveying, interviewing, or questioning people. The completed IRB Class Project Form must be submitted with the Capstone Proposal.

**What is the IRB?**

The University of Denver’s Institutional Review Board reviews all projects involving human subjects.

**How to Obtain IRB Review and Approval**

The student must submit a completed IRB Class Project Approval Form for any Capstone Project that involves human subjects. The student should submit the completed form to the Capstone Advisor and the Academic Director with the Capstone Proposal.
Further IRB review may be required for Capstone Projects that have extensive use of human subjects. The Capstone Advisor and the Academic Director will advise the student regarding any additional necessary IRB review and help the student with this review.

For additional information about the Institutional Review Board (IRB) go to: http://www.du.edu/orsp/irb.html.

If the Capstone Project does not involve human subjects, the IRB Class Project Approval form is not submitted.

**COMPLETION AND SUBMITTAL OF THE CAPSTONE PROJECT**

**IMPORTANT:** The following schedule applies both to students registered for the Capstone Project and to students seeking to make up a grade of “Incomplete” from a previous quarter.

**Submission, 7th week:**

The final draft of the Capstone, whether in electronic or paper format, is due simultaneously to the Capstone Advisor and the Academic Director no later than the end of the 7th week of the quarter in which the student is registered for the Capstone Project. This version should include all required elements of the Capstone Project as spelled out in these Capstone Guidelines, including title page, abstract, text, and reference list. It should conform unerringly to The Chicago Manual of Style and Department of
Geography format and style requirements.\textsuperscript{1} This final draft should be submitted with contents and format substantially complete and free of major errors. With the final draft, the student indicates that he or she is finished with the Capstone Project, pending incorporation of changes suggested by the Capstone Advisor and Academic Director.

\textbf{Feedback, 8\textsuperscript{th} week:}

After consulting with the Academic Director, the Capstone Advisor will provide feedback on the final rough draft no later than the end of the 8\textsuperscript{th} week of the quarter.

\textbf{Submit Final Version, 10\textsuperscript{th} week:}

This final version must address and contain edits/changes as per advisor and/or director guidance. \textit{Upon approval by the Academic Director}, the final version of the Capstone is submitted by the student to the Electronic Capstones, Theses and Dissertations Database (http://ectd.du.edu) no later than the last day of the quarter.\textsuperscript{2} The student should not submit the final version to the ECTD until it has been approved by the Capstone Advisor and by the Academic Director.

\textbf{IMPORTANT:} All completed Capstone Projects must be submitted to the Electronic Capstones, Theses and Dissertations Database (http://ectd.du.edu) in order to receive a grade on the Capstone Project.

\textsuperscript{1} Department of Geography “format and style requirements” are between student and capstone advisor.

\textsuperscript{2} The Electronic Capstone, Theses and Dissertations Database should be available to Geography students in Academic Year 2009-2010.
**Capstone Presentation**

Students preparing to graduate are expected to present the results of their capstone projects at a professional gathering. This can be a dedicated GIS meeting or conference. It can also be a topical meeting or conference, for example, a water industry or environment focused gathering. Students may present a paper or participate in a conference poster session. There are numerous opportunities to present one’s work throughout the world and it is important for students to begin to become involved in the GIS community.

A University of Denver faculty or capstone committee member will attend the conference where the student is presenting, or the faculty committee will have a professional colleague in attendance to see the presentation.

**Elements of the Capstone Project**

Hubbuch (2004) says that when a teacher assigns a student to do a research paper, the teacher invites that student to participate in the “grand conversation” about the topic he or she has chosen. Gibaldi (2003) says that people undertake research when they want to explore an idea, probe an issue, solve a problem or make an argument. They then seek out, investigate and use materials beyond their personal knowledge and expertise. They present the findings and conclusions of our inquiry in a clearly written paper.
Most Capstone Projects are traditional research papers that rely upon primary research, secondary research, or a combination of the two to support the thesis. Primary research is the study of a subject through firsthand observation and investigation, such as conducting a survey or an interview, carrying out an experiment, or analyzing a text, film or performance. Primary sources include statistical data, historical documents, or works of literature and art (Gibaldi 2003, 3).

Secondary research is the examination of studies and works that other writers and researchers have made of a subject. Examples of materials in a secondary study include books and articles about business trends, economic topics, political issues, scientific debates, historical events, or literary works. Most Capstone Projects rely on secondary research to support their theses (Gibaldi 2003, 3).

**Research Capstone Projects and Applied Capstone Projects**

This section provides guidelines for research and applied Capstone Projects. These are guidelines, not a template or outline. The student and the Capstone Advisor should agree during the Capstone Proposal stage whether each of these is required and to what degree they should be developed based on the needs of the student’s Capstone Project.

**Abstract**

All Capstone Projects must include a brief (no more than 120 words) abstract. The abstract provides a concise overview of the Capstone Project
and its key findings and should be written after the rest of the Capstone Project is complete.

**Introduction**

This should contain the thesis statement, which is the claim the student makes about the topic. It should also give a brief history and/or foundation for the topic, state the goals for the Capstone Project, and outline the benefits of the Capstone Project.

**More about Thesis Statements**

As already noted, the thesis statement is the claim or assertion made by the student about the chosen topic. It should foreshadow the conclusion the Capstone Project will make about the topic, if a conclusion can be reached. A thesis statement evolves during the process of researching and writing about a topic. A Capstone Project begins with a working thesis. As the student researches, writes, and thinks critically about the topic, the statement gels into a conclusion or set of observations about the topic.

Hubbuch (2004, 146) suggests three questions to pose about the thesis as a project develops:

(1) Were my original assumptions and working thesis valid?

(2) Based on the evidence I found, what conclusions have I drawn about my subject?
(3) What statements do I feel comfortable making about my subject?
(The Capstone Project should include inferences and judgments, not just factual statements.)

After answering these questions, the student should be ready to write the thesis statement.

**Literature Review**

This section is the “state-of-the research” on the chosen topic. As noted earlier, it should be a comprehensive summary of the evidence relating to the topic, although not an exhaustive summary. Certainly the major sources relating to the topic should be covered. Through critical analysis and evaluation of the sources, the literature review should also provide support and justification for the investigation of the topic and the development of the thesis statement. The reader should finish this section with a good basis of knowledge of the topic and an understanding of why the thesis statement was formulated.

**Design and Implementation**

In this section, the student explains how the Capstone Project was accomplished. This section addresses the methodology used to pursue the thesis; how surveys were assembled and conducted; and the criteria used to sift through data and draw conclusions. The student should also discuss any problems that arose during the Capstone Project.
Results

These are the findings of the Capstone Project.

Discussion

This is a discussion of the implications of the results of the Capstone Project, focusing particularly on how this Capstone Project adds value to the current research on the topic.

Areas for Further Research

In this section, the student identifies and discusses possible areas for future research.

References

The reference list must be fully compliant with The Chicago Manual of Style author-date format and in full agreement with the text. Optionally, the student may include a separate selected bibliography.

Applied Capstone Projects

A student who wishes to complete an Applied Capstone Project, such as a software application or software code, or other form of practical output, must submit their Capstone Project in two parts.

The first part comprises the applied project itself, e.g., plan, software program, manual, etc. This part is often submitted as an appendix to the Capstone Project report.

The second part is in every respect a traditional academic paper, using researched evidence to shore up the elements that went into the applied
work. In this section, the student submits evidence that the applied project has a solid basis, academic foundation, and utility.

For example, if a student were to submit a software application as the Capstone Project, the student should generate two products: (1) the software application itself; and (2) an academic research paper demonstrating the business principles upon which the plan is based. These two products would be combined into a single Capstone Project Report.

Examples of applied Capstone Projects include:

1. **Software Products**—explain the market need for the product, based on research. Go into detail about the information systems theories that were applied to create the product. Discuss how the product builds upon or improves earlier products or software versions. Fundamentals from the student’s degree program should be employed to craft the program or product. Relate how the product fits into the current marketplace.

2. **Teaching/Training Plans**—explain how the plan was put together. Provide researched evidence for why certain decisions were made with respect to the learning outcomes or training objectives to be achieved by the plan. What educational theories were followed? Who or what were sources of guidance and inspiration? What are the current trends in teaching the subject at the pupil’s grade level or in training within the pupil’s profession?
**Confidential or Proprietary Capstone Projects**

The Department of Geography strongly advises students against proposing and conducting their Capstone Project on “confidential” or “proprietary” topics, such as a company’s trade secrets or proprietary material. Multiple problems can surface, including inadvertent release of the Capstone Project. A confidential Capstone Project inherently contradicts the purpose of meaningfully contributing to the research and intellectual conversation about the chosen topic. Sharing the results of research is an important academic principle.

If a student proposes a confidential Capstone Project, he or she must receive permission from the Capstone Advisor and the Academic Director. The student must agree to hold the Department of Geography and the University of Denver harmless in the event the contents of a confidential Capstone Project are wholly or partially divulged, whether by mistake or intent, by anyone involved in the Capstone process.

The electronic transfer of documents and information has inherent risks, and may result in the accidental release of material from a confidential Capstone Project.

**Capstone Project Grades**

The student must receive a “B” or better on the Capstone Project to graduate.
If the student cannot complete the Capstone Project within the quarter in which he or she is registered, and if good cause exists, the Capstone Advisor may grant a grade of “Incomplete.” The student must submit an “Application for Incomplete Grade” to their capstone advisor. The Capstone Advisor and the student will agree on a written list of the remaining requirements to be met and a new timeline for the project.

**DEPARTMENT OF GEOGRAPHY FORMAT AND STYLE REQUIREMENTS**

**THESE REQUIREMENTS APPLY TO ALL DEPARTMENT OF GEOGRAPHY CAPSTONE PROPOSALS AND CAPSTONE PROJECTS.**

All Capstones must follow the latest edition of *The Chicago Manual of Style* ("Chicago"). In addition, this “Format and Style” section sets forth mandatory requirements that are specific to the Department of Geography. Generally, these are additional requirements beyond those in Chicago. If there is a conflict between Chicago and the Department of Geography requirements listed immediately below, the student must conform to the Department of Geography Format and Style Requirements.

**Margins**

Margins must be one inch on all sides. The right-hand margin must not be justified.
**Fonts**

The primary font must be regular Verdana, twelve point. Other fonts and sizes can be used inside figures and appendices. However, such use must be occasional and limited to these purposes.

**Formatting of text**

The main body text must be formatted using Microsoft Word’s format and style functions (e.g., hanging indent for references, indented text blocks for quotations, indented first lines in paragraphs). Do not use embedded spaces, tabs, or right-hand justification to format the main body of your text.

Remove any unnecessary embedded spaces.

The occasional use of tabs and justification to format text is permitted, e.g., right justification in headers, tabs in tables.

Use line breaks and non-breaking spaces to prevent large gaps preceding URLs.

**Tables**

Table numbers and titles should appear above each table. Use a consistent numbering and capitalization for table numbers and titles. Table content style should be consistent among tables.
Figures

Figure numbers and captions should appear below each figure. Use a consistent numbering and capitalization scheme for figure numbers and captions.

Line Spacing

The entire document must be uniformly double spaced. Do not insert any extra vertical space between paragraphs.

Word Spacing

Generally, only a single space is used after punctuation marks, including after the end of a sentence, see Chicago §§ 2.12 and 6.11

Page Order

The first page is always the Title/Approval Page. The second page is always the abstract. For subsequent pages, follow The Chicago Manual of Style.

Page Numbering

All pages of the Capstone are numbered. The front matter (e.g., title page, abstract, table of contents, list of figures, etc.) is numbered with lower case Roman numerals. However, the number does not appear on the Title/Approval Page even though it is page “i.” The report itself is numbered with Arabic numerals starting with “1.” Page numbers must appear in the upper right-hand corner and are preceded by the author’s last name. A single hyphen (leave no space on either side) appears between the author’s
last name and the page number, e.g., “Jones-15.” These Guidelines follow this page numbering format.

NOTE: To restart Word’s automatic page numbering, insert a section break or page break. Then use “Insert” >> “Page Numbering” to format page numbers.

**Word Count**

The Capstone Project must be between 9,000 and 12,000 words. This translates to 45 to 60 pages of double-spaced text with 1-inch margins using 12 point Verdana. A minimum of 9,000 words is required. Capstones exceeding 12,000 words are permitted, with approval of the Capstone Advisor and Academic Director.

**Title/Approval Page**

This must follow the required Department of Geography format and include signature lines for the Capstone Advisor and Academic Director. An example is shown in the appendices.

**Abstract**

This summarizes the point of the Capstone Project in no more than 120 words. It is a single block paragraph. It is not indented. It must be non-evaluative and mention results without beginning the discussion on those results. The abstract is always the first page (i.e., page ii) after the Title/Approval Page.
Capstone Guidelines

The student must use the current version of Guidelines for Department of Geography Capstone Proposals and Projects. These are available at the Online MSGISc program website.
References


APPENDICES

Capstone Project Readiness Checklist
Sample Title/Approval Pages
Sample Capstone Proposal Title Page
Sample Grading Rubric
Capstone Project Readiness Checklist

The student should confirm that the Research or Applied Capstone Proposal includes the following required elements:

- The thesis statement for the Capstone Project.
- The statement of the goals or objectives of the Capstone Project and the anticipated benefits or significance.
- The preliminary review of the literature.
- The Capstone Project design and work plan.
- A preliminary description of the final product.
- A schedule of deadlines and tasks.
- A statement of anticipated results.
- A statement of anticipated obstacles and plans for dealing with them.

The student should confirm that the Creative Capstone Proposal includes, as appropriate, the following required elements:

- The creative statement for the Capstone Project.
- The project foundations.
- The desired outcomes of the Capstone Project.
- The project goals and discussion of how the student’s experience fits with those goals.
- The project schedule.
Crime Mapping: Light Rail and Journeys to Crime

Pat Student
University of Denver Department of Geography
Capstone Project
for
Master of Science in Geographic Information Science
April 3, 2009

__________________________________________
Pat Faculty, Ph.D.
Capstone Advisor

__________________________________________
Steven R. Hick
Academic Director
A Capstone Signature Page Where the Advisor Is Also the Academic Director

Pat Student
University of Denver Department of Geography
Capstone Project
for
Master of Science in Geographic Information Science
April 3, 2009

_____________________{Steven R. Hick}
Capstone Advisor and Academic Director

Upon the Recommendation of the Department

_____________________{Andrew Goetz, Ph.D.}
Department Chair
Capstone Proposal

Crime Mapping: Light Rail and Journeys to Crime

Pat Student
Department of Geography
University of Denver
April 3, 2009
Sample Grading Rubric

Here are some common methods Capstone Advisors use to evaluate and grade Capstone Projects.

**Organization.** The Capstone Project should include all agreed-upon elements, such as the Title Page, Abstract, Introduction, Literature Review, Project Design, Results, Discussion and References sections. Capstone Advisors may also decide to require an Outline and a Selected Bibliography, which is a type of “For Further Reading” list.

**Excellent**—If the Capstone Project’s organization is excellent, each section will be well identified and self-contained. Each will follow logically from the previous section.

**Average**—A sub-par paper does not fully separate the sections adequately or accomplish a coherent flow.

**Poor**—Inadequate papers contain no subheadings and no separate sections at all.

**Content.** In an excellent paper, the topic is very clearly explained and the thesis statement is crystal clear and compelling. The thesis statement is fully appropriate to the degree discipline and provides a unique and creative solution to a problem. Throughout the paper conclusions are well supported by research and data, and the analysis is provided in a cogent and convincing manner.
**Excellent**—The topic is very well explained and the thesis statement is crystal clear, unambiguous and compelling. The thesis statement is fully appropriate to the degree discipline and provides a unique and creative solution to a problem.

**Average**—The thesis statement is identifiable, but not as clear as it could be. Analyses are present, but not always supported by the research and data. The case is not made in the most cogent and convincing manner.

**Poor**—Thesis statement is deficient or entirely missing. No conclusions or analyses are offered. The evidence is weak or thin.

**Focus.** Every section, every paragraph, every sentence, and every word of the paper in some way relates to the thesis of the project. Every piece of it moves the thesis along to its logical conclusion. Irrelevant material has been cut out. This is no time for tangents; the student has only limited space to accomplish his or her goal and the paper is to be a singular, coherent, logical whole. The topic and thesis statement should be narrowly tailored as to be manageable within the confines of the paper.

**Excellent**—Sections are well identified and self-contained. Every section, every paragraph, every sentence, and every word in some way relates to the thesis of the paper. Every piece of it moves the thesis along to its logical conclusion. The paper flows well.
**Average**—The student did not fully separate sections or delineate parts of the paper. Some parts do not relate to the thesis or fail to move it along to a conclusion. At times the student seems to be writing about more than one topic, instead of having a singular focus. The paper is choppy.

**Poor**—There are no subheadings or sections which separate the paper into parts. Irrelevant material abounds. The paper is missing a logical conclusion, and there is no flow. It skips around from topic to topic --- many parts have nothing to do with the thesis.

**Mechanics.** The paper is free of errors in spelling, capitalization, punctuation, grammar, language usage, and style. Typographical mistakes have been remedied. The final version submitted to the Electronic Capstones, Theses and Dissertations database should be flawless; this is a searchable, public database, and the Department of Geography wishes to showcase the best work of its students. The final product should be something to make the university, the Capstone Advisor, and the student proud. While Capstone Advisors will grade on mechanics, provide editorial guidance, and note errors in language, style, punctuation, capitalization, and spelling, it is not their responsibility to edit or serve as proofreaders or editors.
Excellent—The paper is free of errors in spelling, capitalization, punctuation, grammar, language usage, sentence structure, and style. There are no typographical mistakes.

Average—The paper has occasional typos or minor punctuation errors.

Poor—The paper contains errors in spelling, capitalization, punctuation, grammar, language usage, sentence structure, and/or style.

**Tables, Graphs and Other Figures.** To the extent that these are used—and they are highly encouraged for most papers—they are useful, complete, and follow *The Chicago Manual of Style* formatting rules. Statistical models are applied correctly. Conclusions are appropriate and well supported. Data are clearly presented and contextually comparable.

Excellent—When used, and they are highly encouraged for most papers, they are useful, complete, and follow Department of Geography style and formatting rules. The student has correctly applied statistical models, and data conclusions are appropriate and well supported. Data are clearly presented and contextually comparable.

Average—Statistical processes are correct, but results are not fully described or are overly generalized. Data are not presented as clearly as they could be. Figures are not as easy to read as they could be.
Poor—Processes are used or applied incorrectly. Tables are not well-conceived or presented. Errors in labeling of graphics abound. Figures are difficult to read or understand.

**Format, Appearance and Submission.** The paper adheres unerringly to the guidelines of *The Chicago Manual of Style* and the Department of Geography Format and Style Requirements (see below). The paper is carefully laid out, well designed, and of good quality. Finally, the Capstone Project is approved by the Capstone Advisor and Academic Director and is submitted to the Electronic Capstones, Theses and Dissertations database by the last day of the quarter.

Excellent—The paper complies unerringly with the Department of Geography Format and Style Requirements. It is carefully laid out, with well-designed graphics. The paper is submitted on time.

Average—Design elements are followed reasonably well, but with a few errors. Format mistakes are made. Reproduction and appearance is not as good as it could be. The paper is a day or two late.

Poor—Sloppy page layout. Poor appearance. Formatting rules not observed. Paper is very late.

**References and Citations.** The Capstone Project is fully compliant with *The Chicago Manual of Style* rules for documenting sources. *NOTE: the Department of Geography uses the "author-date" style for documenting sources in the text and in the Reference list.* The hanging indent format is
used correctly in the “References” list. The list and the text of the paper are in perfect agreement, meaning every source on the reference list appears as a citation in the text, and every citation in the text appears in the reference list. To the extent that web sites and other electronic sources are included, the student should verify that the electronic information listed is up-to-date (i.e., the web site is still available).

**Excellent**—The Capstone Project is fully compliant with *The Chicago Manual of Style*. The hanging indent format is used correctly in the reference list. The list and the text of the paper are in perfect agreement, meaning every source on the references list appears as a citation in the text, and every citation in the text appears in the reference list. To the extent that websites and other electronic sources are included, the student has verified that the electronic information listed is up-to-date (i.e. the website is still available).

**Average**—Style requirements are only loosely followed. Some references and citations have been missed. The reference list is not in agreement with the text at times.

**Poor**—No reference list is included and several citations are missed. Note: It is plagiarism if the student has failed to give credit to sources where it is due. Plagiarism can result in a failing grade for the paper, and additional sanctions are also possible.
**Project Management.** Finally, Capstone Advisors should consider the student’s management of the entire Capstone Project when deciding the final grade. Criteria include how well the student worked with the Capstone Advisor, met deadlines, and handled problems.

**Excellent**—The student has managed the paper and its deadlines well. The student has worked well with the instructor, responding to feedback and suggestions. Problems were quickly and fully addressed.

**Average**—Attentive management to the task at hand was lacking. The student did not always respond to feedback. The student was occasionally uncommunicative about the paper and its needs. Many problems went unresolved.

**Poor**—The student was unresponsive, difficult, defensive, and uncooperative. Deadlines were blown. Feedback was ignored or rejected. Problems were allowed to worsen.