Capstone Project Requirements

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Table of Contents

General Information	1
Special Note for Creative Writing Students	1
Goal of Capstone Project	1
Elements of the Capstone Project	2
Confidential of Proprietary Capstone Projects	3
Protection of Your Intellectual Property	4
Eligibility Requirements	4
Grading	4
Writing Requirements	5
Organization and Presentation of Paper	6
Title Page	7
Abstract	7
Table of Contents	8
Introduction	9
Literature Review	10
Design and Methodology	12
Results	12
Discussion	12
Areas for Future Research	13
Conclusion	13
References	13
Appendices	14
Special Instructions for Inclusion of Applied Project Products	14
Timeline and Deadlines	16
98 Percent Complete Submission, 7 th Week	16
Feedback, 8 th Week	17
Submit Final Paper, 10 th Week	17
Capstone Project Digital Commons Submission	17
References	20

General Information

The guidelines in this document are intended for those students who have chosen to complete their capstone requirement using the individual *capstone project* option.

IMPORTANT NOTE: If you are using the capstone seminar option to complete the capstone requirement, these guidelines do not apply to you. See your capstone seminar course home for details on your paper.

Special Note for Creative Writing Students

If you are a creative writing student, please refer to the PioneerWeb Capstone tab for the "Creative Capstone Project Requirements" document and consult with your academic advisor for specific creative writing capstone project instructions.

Goal of Capstone Project

The capstone represents the final academic activity of the Master's degree course of study in which the student presents a graduate-level product that demonstrates competency in areas such as research, written communication, integrative and analytical thinking skills, problem solving, and decision-making ability. A project that merely restates and summarizes what is found in the literature is not an acceptable capstone project. Capstones must contribute meaningfully to the student's field, providing the student's unique perspective on the issue, problem, or theme being addressed.

It is your responsibility to conduct a final project and present an associated final paper that represents a culminating performance in your Master's program. The capstone demonstrates mastery of the content taught in your program and completion of the learning objectives of the program.

Prior to the beginning of the project, you will have chosen a faculty member to serve as the capstone advisor, with the academic director's approval. You will have completed the DU IRB training modules in www.citiprogram.org and submitted a copy of the certificate to your capstone advisor, and attached a copy to your proposal registration (see "Capstone Proposal Requirements"). You will have written, in consultation with your capstone advisor, a formal proposal for the capstone project, registered that proposal with student support services, and received approval from the academic director. If any type of human subject research, including interviews, surveys, etc., is included in the project, you are also responsible for submitting the proposal to the DU IRB through www.IRBnet.org. IMPORTANT: No formal primary human subject research may begin until IRB review is complete and you have provided a copy of the approval email to your capstone advisor.

Elements of the Capstone Project

Hubbuch (2004) asserts that when a teacher assigns a student to complete a research paper, the teacher invites that student to participate in the "grand conversation" about the topic he or she has chosen. Gibaldi (2003) notes 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 the inquiry in a clearly written paper.

Most capstone projects have varying elements of 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, evaluating existing data 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 (Gibaldi 2003, 3). Always provide proper attribution for all sources of material that are not your original thoughts or ideas. Such sources of material include all intellectual property such as patents, copyrights, trademarks, and service-marked material.

Confidential or Proprietary Capstone Projects

University College 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 the hold University College 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.

Protection of Your Intellectual Property

If your capstone project includes the development of new material or products that meet the definition of intellectual property (IP), it is highly recommended that you seek legal protection of your original work through copyright, patent, trademark, etc. Consult an IP attorney for guidance. Detailed explanation of the various aspects of IP and implications for protection of your original work is available from the World Intellectual Property Organization (2013).

Eligibility Requirements

You may complete the capstone project only after being fully accepted as a degree candidate, having completed a minimum of 40 quarter hours in your program, with a cumulative GPA of 3.0 or better.

To be registered for the capstone project, you will have completed and received academic director approval of the capstone proposal in the term *prior* to the term in which the capstone project is registered. Please see "Capstone Proposal Requirements" in PioneeerWeb → University College → Capstone tab for instructions. If you have not completed the capstone proposal, CITI training, and capstone project registration, you may not begin your capstone project.

Grading

The capstone project is a course to which a final grade is assigned. The grade is based solely on the final paper, in which the student presents and defends his or her work. A final grade of B- or better is required to meet the graduation requirement. A grading rubric is

provided in the capstone tab. It is strongly recommended that you evaluate your paper against this rubric as you write.

In rare circumstances you may encounter a situation that prevents completion of the project within the term registered. In consultation with the capstone advisor, an incomplete grade may occasionally be assigned. A new completion date will be established. Consult with your academic advisor and capstone advisor if you are unable to complete the project and paper on time. Criteria for incomplete grades include completion of a minimum of 80% of the course work prior to the end of the term.

If you complete the project and receive less than a B- grade, you will be required to repeat the entire proposal/project process with a new topic, including tuition payment for the repeated capstone project course. The capstone may only be repeated once.

Writing Requirements

As with all written material submitted within University College programs, adherence to the current edition of Kate Turabian's *A Manual for Writers of Research Papers, Theses, and Dissertations: Chicago Style for Students and Researchers* author-date documentation style is required.

Writing follows the *University College Format and Style Requirements* document. A copy of the document is found in the capstone tab. If there is a conflict between the University College requirements listed in this document and the Turabian text, the student must conform to the *University College Format and Style Requirements*.

Organization and Presentation of Paper

The final paper for the project will be organized and written according to the following

instructions. Please follow them closely and consult with your capstone advisor often for additional guidance. Failure to follow the instructions may result in a lower grade.

The sequence in which you prepare your final paper will depend on the nature of your topic. In general, a good sequence is to begin with the literature review and then draft an introduction to which you will return at the end and finalize. Build the design and methods section next, explaining precisely what you did and why, and then proceed into the presentation of results. Be creative in the actual presentation of your information. Use charts, pictures, graphs, and other formats to enhance and support the text. Next write your discussion and evaluation of the results. Remember throughout your writing that you are selling your topic and its importance to your readers. You are attempting to convince them that your thesis statement is valid. Present the challenges you encountered. What did you learn that was unexpected? If there are areas for future research that you wish to present, include that section after the discussion with a clear transition. The conclusion is next. First restate your thesis statement to contextualize your conclusions. Was the project successful? Why or why not? What might you have done differently? State what you learned in this project that will not affect your future practice. Bring the paper to a compelling end with a concluding statement that emphasizes the primary outcome of your paper. Finally, circle back and revise the introduction, write the abstract, and review your title for any revision. Add your references, any secondary bibliography, and any appendices, including any surveys, questionnaires, etc. that you used. If you obtained IRB approval, include a copy of the email text. If you did an applied project, your final product is included as an appendix. See more information on applied projects below.

Now, read your paper to yourself out loud and to someone you trust to be honest with you. Was this person able to grasp your project and outcome? Does it make sense to him or her? As your last step, proofread again and again! Attention to detail in the presentation is the ultimate goal. Before turning in your paper, evaluate it against the capstone grading rubric in the capstone tab, and grade yourself. Make last minute adjustments to maximize your grade.

The final paper is between 9,000 and 12,000 words. The prescribed order and basic content for each portion of the paper are as follows:

Title Page

The title page will be organized according to the title page example for capstones found in the *University College Format and Style Requirements*. Your title is enticing and draws the attention of potential readers. A title is descriptive of your work. Using the example first presented in the "Capstone Proposal Requirements," an example of a well written title is:

Promoting Infant Safe-Sleep Practice:

A Marketing Plan for Retailers of Infant Crib

Abstract

The abstract does not exceed 120 words. The abstract always follows the title page. It is always numbered "Last Name-ii." It is a single block paragraph. It is not indented. First, present the topic or issue being discussed throughout your project. Second, identify the problem you are addressing. Third, within one or at most two sentences, state the product being produced and what you discovered. Fourth, provide your outcome and conclusion. The abstract should be the last section written for the capstone project.

Using the safe sleep topic, this is an example of a well-constructed abstract with

notation in brackets:

Safe sleep practice for infants requires the elimination of all loose objects and bedding from the crib throughout the first year of life [ISSUE BEING ADDRESSED IN PROJECT].

Current retail advertising frequently does not display proper practice [IDENTIFIED PROBLEM]. This project develops a marketing plan to assist retailers in promoting safe sleep practice to buyers be use of display techniques that demonstrate the proper contents of an infant crib [DESIGN/RESULT]. Presentation of the marketing plan to retailers of infant cribs informs them regarding safe sleep practice and encourages them to display their products in a manner that reinforces safe sleep practice among new parents [OUTCOME].

Table of Contents

The table of contents (TOC) is constructed according to the *University College Format* and *Style Requirements*. It is recommended that you use the TOC feature found in Microsoft Word to create your table of contents.

The order of the TOC is:

Abstract

Table of Contents

Introduction

Purpose of the Capstone and justification for the topic

Goal

Thesis Statement

Literature Review

Design and Methodology

Results

Discussion

Areas for Further Research

Conclusion

References

Appendices

Note: See the applied project directions and example below for ideas on how to approach your project, using the safe sleep topic.

Introduction

The introduction presents the topic to be studied along with justification for choosing the topic. Initial background information to support the importance of the topic is presented, including reports of known facts on the particular topic or subject. To be truly argumentative, a conceptual research topic should address a question that is at issue—that is, a question that is still being discussed and has not been resolved or put aside—and to which there are two or more reasonable answers. Goals of the project are outlined. The introduction ends with the presentation of the thesis statement (TS). The thesis statement is generally a single statement that clearly and concisely establishes what you intend to study and create as a result of your project. Projects may be traditional research or applied in nature. Typically, the TS is a strong statement of belief about the topic you plan to investigate, create, or prove/disprove (see "Capstone Proposal Requirements" for more TS guidance.

Moving forward, provide a smooth transition that moves the reader easily from one

section to the next. Throughout the paper, provide evidence of progression of thought, originality, and creativity.

Literature Review

A review of the literature is the "state of the research" on the chosen topic, providing substantial documentation of background information to support the selection of the topic and the direction of the original work to be completed as a result of the project. Literature selected should represent original, peer-reviewed work conducted by industry or topic expert authors.

Non-peer-reviewed internet sources should represent a minimal percentage of total sources.

Utilize the DU library and research division for assistance as needed. Search professional libraries when appropriate.

The literature review is written as a flow of thought beginning with the basic concept being studied, gradually delving deeper into the specific areas to be studied. The literature review should not read as a book report or a list of source summaries. It demonstrates your ability to analyze and synthesize your reading into your own thoughts, and present them. Your rationale for using your sources should be easily identified by the reader. Organize referenced comments in an orderly, flowing manner. Use Turabian's author-date style for citations, for example, (Einstein 1905). Do not use footnotes or endnotes for source citation. Information that would otherwise be footnoted should be incorporated into the text and cited as necessary. Conclude the Literature Review with a paragraph that transitions the reader to the Design and Methodology section.

Some special considerations in development of the Literature Review:

A literature review is not a summary of all the sources the student consulted on the

topic of the capstone. The literature review may contain some summary. However, the focus of the literature review section should be on synthesis rather than summary; the literature review section should provide an overview of the field.

A literature review is not the same as a research paper. The purpose of a research paper
is to provide support for the student's own arguments; the purpose of a lit review is to
"summarize and synthesize the arguments and ideas of others without adding new
contributions" (Writing Center 2013).

The following questions may be useful you to consider as you develop the literature review:

- What is known about the subject?
- Are there any gaps in the knowledge of the subject?
- Have areas of further study been identified by other researchers to consider?
- Who are the significant research personalities in this area?
- Is there consensus about the topic?
- What aspects have generated significant debate on the topic?
- What methods or problems have been identified by others studying in the field, and how might they influence your research?
- What is the most productive methodology for your own research based on the literature you have reviewed?
- What is the current status of research in this area?
- What sources of information or data were identified that might be useful to you?

Design and Methodology

This section explains how you intend to approach your project. What is the process you

intend to follow to conduct the research or produce your project? Briefly review the research question or creative product you are exploring. Describe sources you may seek for secondary research. If including primary research, discuss methods of data collection and analysis. Indicate whether IRB review is required and why. If conducting interviews, surveys, or questionnaires, describe the content and purpose in this section. Include actual documents as appendices. At all times the design and purpose should reflect your thesis statement and remain aligned with the intent of your thesis statement. Beware of "scope creep"! You will encounter many new concepts throughout your research, but be cautious not to get sidetracked or expand your original focus. Stay true to your thesis statement at all times.

Results

This section will be concise and present what you discovered or created. If you have data, present it in graph or chart form when appropriate. If you created something such as a business plan, present it creatively. PowerPoint® slides may be appropriate in some cases, and you may include the slides as part of this section. Do not discuss your results in this section; rather, present them to the reader for consideration.

Discussion

In this section you will demonstrate critical and creative thinking as you discuss the research process and results. Compare and contrast your findings with the literature. Defend your thesis statement. Was it correct? Did you validate your point of view? Why or Why not? Imagine that you are presenting your findings to a group, and you must explain what they mean and why they are important. Demonstrate the academic significance of the project and how it relates to your course of study. The discussion is where you demonstrate mastery of the

knowledge you gained in your course of study. You will also demonstrate mastery of research skills and proficiency in professional written communication. Demonstrate that you have created an original product. Identify how you have produced a unique solution to a problem or opportunity: a publishable piece of research, a marketable product, a technical application, or other creative endeavor.

Areas for Future Research

Describe what you believe may be opportunities to conduct additional research on your topic, further develop your product, or other ideas you may have related to your project. How might a future student build upon your project?

Conclusion

Circle back to your thesis statement. Did you accomplish what you set out to do? Did you successfully demonstrate mastery of your field of study? How did this project experience affect your current position? Did you learn anything that will allow you to significantly advance in your field? Have you contributed a significant work to your field of work and study? Create a creative, compelling, concluding paragraph that leaves your reader with a "wow"!

References

The reference list must be fully compliant with the current edition of *A Manual for Writers of Research Papers, Theses, and Dissertations: Chicago Style for Students and Researchers*, author-date style and in full agreement with the text. You may include other articles and works you consulted in the course of your research that are not specifically cited within the text if they are highly influential upon your work. Do not include sources reviewed in the research process that do not have substantial impact on the project. Additionally, you may

create and include a list of pertinent literature to which the reader is directed for additional information as a separate bibliography under appendices.

Appendices

Attach copies of IRB approval email (if indicated), surveys, questionnaires, interview formats, and other supporting evidence. Refer to the Turabian text for guidance on appropriate documents for the appendix.

Special Instructions for Inclusion of Applied Project Products

A student who wishes to complete an applied capstone project, such as a detailed business plan, training plan, or other form of practical output, will submit their capstone project in two parts:

- 1. The first 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 paper, the student submits evidence that the applied project has a solid basis, academic foundation, and utility. The academic paper portion of such a project is generally 4000-5000 words.
- 2. The second part comprises the applied project itself, e.g., business plan, software program, school curriculum plan, manual, etc. This portion of your paper is submitted as an appendix to the academic paper.

Using the development of a marketing plan for the topic of safe sleep, the student would generate two portions of the final paper:

The academic research begins with an introduction in which the student presents the
problem, and validity of the problem, including why this research is important to the
body of knowledge. The literature review is conducted, examining the background of

the importance of safe sleep practice, which would involve the history of sudden infant death syndrome, the national public health campaigns behind safe sleep practices, and so on. In this section the student provides evidence of the problem. Evidence might include pictures from catalogs of inappropriate crib displays, being careful to avoid identifying the retailer. Literature review might also include attempting to find successful crib display practices in other countries. Primary research might include an interview process of prominent retailers of infant cribs, which would require IRB review. A design and methods section would present the process in which the marketing plan is developed. In this case, the marketing plan is the primary result; if interviews or surveys were done, that data would be presented in this portion of the paper. The discussion section might include further discussion of the student's experience in completing the project, challenges (which would be many!) to implementation of the marketing plan, demonstration of the marketing principles upon which the plan is based, and additional information on successful infant crib displays, for example. The conclusion would circle back to restating the thesis statement and then analyze the degree of success of the project from the student's perspective. Finally, the student might present next steps in addressing retail practices that affect parental behavior. A list of resources to help educate parents on safe sleep might be included as a secondary reference list.

The marketing plan itself is presented as an appendix to the first part of the project. The
marketing plan would be fully executable and ready for implementation, i.e., presented
in a way that is consistent with principles of marketing plans.

These two products are then submitted as a single capstone project final paper. Consult

your capstone advisor for assistance in determining the appropriate length of the academic portion of an applied project paper.

Timeline and Deadlines

Refer to the capstone tab "Capstone Flow Chart" for detailed dates related to capstone project submissions. Key deadlines are reviewed here. Students submit all drafts solely to the capstone advisor. After approving the draft, the capstone advisor will forward it to the academic director for review.

Week 7 - 98 Percent Complete Submission

The final draft of the capstone, in appropriate electronic format, is due no later than Friday of week 7 of the quarter in which the student is registered for the capstone project. The draft will have been submitted to and reviewed by the capstone advisor prior to this date for his or her approval. After working with the student to make any last revisions or corrections, the capstone advisor forwards the draft to the academic director. The director will provide feedback to the capstone advisor by the end of the 8th week.

The 7th week final draft should meet all of the following requirements and be close to one hundred percent complete and polished. This version should include all required elements of the capstone project as spelled out in this "Capstone Project Requirements" document, including title page, abstract, table of contents, text, and reference list. It should conform unerringly to the current edition of *A Manual for Writers of Research Papers, Theses, and Dissertations: Chicago Style for Students and Researchers*. and the *University College Format and Style Requirements*. This final draft should be submitted with contents and format substantially complete and free of major errors. It is strongly suggested that you grade yourself

against the capstone grading rubric prior to submission. 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.

Feedback, 8th Week

After consulting with the academic director, the capstone advisor will provide the student with feedback on the 7th week draft no later than the end of the 8th week of the quarter to allow time for the implementation of any necessary changes.

Submit Final Paper, 10th Week

The final capstone paper must address and contain edits/changes as per advisor and/or director guidance. This version of the paper will be graded by the capstone advisor using the grading rubric. The academic director will review the advisor's grade and rationale. He or she will concur with the advisor's grade or suggest modifications.

Capstone Project Digital Commons Submission

The University of Denver and University College (UCOL) appreciate the effort it takes to finish a capstone project. Your capstone project is catalogued at the DU library. The Abstract is displayed at: http://digitalcommons.du.edu (Links to an external site).

UCOL asks for a permanent email address so that interested people can contact you directly if they want a copy of your capstone project paper. University College policy, in place since 2011, precludes the College from displaying the entire capstone project paper. The policy was crafted in response to a variety of issues that UCOL and its students experienced over an extended period of time. Please refer to the following policy:

University College Capstone Publishing Policy – As of Summer 2011

Beginning in June 2011, University College capstone papers will no longer be visible on the Digital Commons website. The decision was made for a variety of reasons including the following:

- Student issues due to privacy concerns or propriety content;
- Complaints from copyright or intellectual content holders due to the use or mention of certain materials in some papers;
- Potential liability issues for University College and the University of Denver regarding content on the site;
- Alignment with the policies of other graduate schools at the University of Denver regarding publication of Master's theses and capstone projects;
- Concern that papers may not be considered for publication in academic or trade
 journals, which require that the work be unpublished research. Due to uncertainty in
 digital publishing law, Capstone visibility on Digital Commons may or may not be
 considered a published work.

There are other sites on the internet where students are able to upload their capstone project papers in their entirety and make them publically visible. University College does not endorse any particular hosting site and suggests the student choose the best option for her or his needs. Students must save a separate copy of their papers.

Although the papers will not be visible on Digital Commons, University College will upload all capstone project papers to the site as a repository. This ensures that University College will maintain record of the student finishing the capstone project. Again, these papers are NOT visible through a DU site, nor are they visible through internet search engines.

Further questions should be directed to Director of Research, Writing, and Academic

Projects Dr. Michelle Kruse-Crocker at michelle.kruse-crocker@du.edu with the subject "Digital Commons Policy Question."

References

- Gibaldi, Jospeh. 2003. *MLA Handbook for Writers of Research Papers*. 6th ed. New York: The Modern Language Association of America.
- Hubbuch, Susan. 2004. *Writing Research Papers Across the Curriculum.* 5th ed. Boston: Thomson-Wadsworth.
- Turabian, Kate L. 2013. A Manual for Writers of Research Papers, Theses, and Dissertations:

 Chicago Style for Students and Researchers. 8th ed. Revised by Wayne C. Booth, Gregory

 G. Colomb, Joseph M. Williams, and University of Chicago Press Editorial Staff. Chicago:

 The University of Chicago Press.
- World Intellectual Property Organization. 2013. "What Is Intellectual Property?" Accessed

 December 18, 2013. http://www.wipo.int/about-ip/en/index.html.
- Writing Center. 2013. "Literature Reviews." University of North Carolina at Chapel Hill.

 Accessed December 18, 2013. http://writingcenter.unc.edu/handouts/literature-reviews/.