# Master of Library and Information Science (MLIS)

**Program** 

Capstone Handbook LIS 4901

2024 - 2025



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#### INTRODUCTION

The Capstone Project is an in-depth academic study that offers an opportunity to explore a particular issue in much greater depth than is feasible in a class or seminar paper and to argue your perspective on that issue.

LIS 4901 Capstone (3 credit hours) is an alternative to the Culminating Internship. The Capstone OR the Culminating Internship is required to fulfill MLIS degree requirements. For LIS 4901 Capstone to count toward your MLIS, you must make a C or better in the course.

As part of the Capstone course, students must also reflect on the program learning outcomes and submit an Exit Essay.

Your project should be more than a synthesis of work already done on a particular topic; from your reading, you need to "create a research space" (Swales, 1990) that justifies the inquiry you undertake.

This means that you are expected to:

- a) Look critically at how other thinkers have defined the issue/problem
- b) Decide from your critical assessment of their attempts how *you* can best define the issue/problem
- c) Evaluate other researchers' evidence on the issue/problem to see whether a convincing analysis/answer has been found

#### You then need to:

- d) Define the further research questions that need to be addressed and decide which of these questions you can feasibly address in a small-scale study
- e) Define how you will gather data allow you to address at least one of those questions, bearing in mind your limitations (e.g., time, access to data, etc.)
- f) Define how you will analyze your data to address your research question(s) and justify this approach for analysis
- g) Draw from your analysis significant conclusions from your results and relate your discussion of these to your original research question(s)
- h) Discuss the limitations of your study as well as specify further research that is still needed
- i) (Optionally) use your conclusions to specify some output such as policy or operational recommendations
- j) Deliver your study as a Capstone Paper, as well as a Capstone Presentation to your Faculty Supervisor and Second Reader (optional) via a session open to the public

The key to a satisfactory project is the logical progression from introduction to conclusion, from a research question or questions to investigation, and to the results and discussion, which significantly address the research question(s). That logic must be made clear to your readers.

While you cannot undertake sustained empirical research at this stage, you should undertake some form of original analysis that enables you to explore the question you identify appropriately. The study allows you to contribute to Library and Information Science. It requires commitment, self-discipline, stamina, and time spent identifying and collecting published research, as well as conducting your own research study, but it is also a challenging, stimulating, and satisfying project when successfully completed.

#### PURPOSE OF THE CAPSTONE HANDBOOK

This Capstone Handbook provides the policies and processes related to the LIS 4901 Capstone. While every aspect of the Capstone has been considered in creating this Handbook, it is possible that your situation may call for details that are not included here. Work with your Capstone Supervisor to address any aspects not addressed in the Handbook.

## What is a Capstone?

A Capstone builds upon the knowledge you have gained through all your MLIS learning experiences and bridges your time as a student and your future in the profession.

Due to the limited time available in the quarter system, sustained empirical research cannot be undertaken in the Capstone. However, you should undertake some form of data collection and analysis that enables you to explore and address the research question(s) you identify.

The LIS 4901 Capstone course is offered in the Spring quarter. When LIS 4901 Capstone course is not offered, students can complete LIS 4901 as a Directed Study under the supervision of the Faculty Advisor.

## **Course Requirements**

The LIS 4901 Capstone course includes asynchronous work, such as peer review assignments, lectures, and independent work. You will attend several live class sessions to participate in peer review and receive peer feedback on your work. The LIS 4901 Capstone Syllabus identifies the timing of these live sessions.

You are also required to meet with your Capstone Supervisor throughout the quarter. The specific meeting weeks are identified in the LIS 4901 Capstone Syllabus.

A Capstone Paper and a Capstone Presentation are required. Details about these two items are found later in the Handbook. Your grade for LIS 4901 Capstone will be derived from your participation in the course, your paper, and your presentation as outlined in the Syllabus.

#### **OVERVIEW OF THE CAPSTONE PROJECT**

The process of creating a Capstone has many tasks. In the LIS 4901 Capstone course, you'll work with your Capstone Supervisor to complete all components of your Capstone.

In general terms, the Capstone requires you to:

- Be thoughtful and informed about the issues important to our field
- Evaluate the evidence in the professional and scholarly literature related to the issue
- Create a project plan that follows the structure of a typical research project
- Collect data
- Analyze data
- Arrive at conclusions that are informed by your Capstone and that respond to the importance of this issue to the field
- Present your research in written and oral form

#### THE DETAILS

## Topic

The first step to the Capstone is identifying your topic. The topic should reflect your interests and represent your cumulative MLIS graduate experience. You may wish to use your RMS 4900 Education Research & Measurement course assignments as a starting point for identifying a topic, or you may find inspiration from other courses or learning experiences. Your Faculty Advisor and Capstone Supervisor will work together to guide you in refining your topic into a manageable research project.

# **Preliminary Work**

You must meet with and receive approval from your Faculty Advisor and Capstone Supervisor the quarter before registering for Capstone. For example, if you are doing the Capstone in the Spring Quarter, you must begin meeting with your Faculty Advisor and Capstone Supervisor in the Winter Quarter to begin a discussion about your intentions. If you plan to collect data from human participants, much time is required to obtain IRB approval before the quarter begins (i.e., completion of <a href="CITI training">CITI training</a> for social and behavioral sciences research, as well as completion, submission, and approval of the <a href="IRB Application">IRB Application</a> as outlined below).

Institutional Review Board Approval. If your project involves collecting data from human participants, you must receive DU Institutional Review Board (IRB) approvals before your Capstone quarter begins. There are several steps involved in this approval process. Consult DU's Office of Research Integrity & Education for <a href="further information about research with human participants">further information about research with human participants</a>. You will need your Faculty Advisor's and Capstone Supervisor's approval as one component of this process. Your IRB application requires details about the project, including any questionnaires, interview protocols, or other methodology-related items. Turnaround time for receiving IRB approval from the IRB Board varies.

#### **Project Plan**

Before your Capstone quarter begins, you must create a Project Plan to submit as a graded assignment in Week 1 of your Capstone quarter. In consultation with your Capstone Supervisor, you will refine your research question, confirm the professional

and scholarly literature concepts that support your research, draft your methodology, and create a work plan and timeline. The Project Plan is the starting point for your Capstone because it describes how you will conduct your study. Your initial plans will likely be refined and modified as you progress. You must have your Project Plan created before the beginning of the quarter in consultation with your Faculty Advisor and Capstone Supervisor.

Your Project Plan must at minimum contain the following elements:

- 1. A basic foundation for an "Introduction" section (2-3 pp.)
  - a. Introduce your study here. Describe and explain the following in as much detail as possible:
    - i. What is your topic, and why is research on it needed?
    - ii. What specific study do you wish to conduct, and what are its aims?
    - iii. How, why, and for whom does your study provide benefit?
    - iv. What is the value of your study, and what makes it important?
    - v. If you know it, what is your research question?
- 2. A basic foundation for a "Methods" section (2-3 pp.)
  - a. If you know it, restate your research question
  - b. Describe and explain the following in as much detail as possible:
    - i. How is your study designed, and how will it be conducted?
    - ii. What data is needed to address your topic and/or research question(s)?
    - iii. How and from where will your data be collected?
    - iv. What sampling method will you use, and—if you are using human participants—how would you reach the people or institution(s) of interest? What is the rationale for your sampling decision?
    - v. What ethical considerations does your study have?
- 3. A "Potential References" section for preliminary sources you have found and intend to use (1-2 pp.)

The Project Plan can be written more informally than the Capstone Paper but should serve as a general guide to get you started. The point of the Project Plan is to demonstrate to yourself, your Academic Advisor, and the Capstone Supervisor that you have a clear enough idea of direction for your Capstone.

## **TIMELINE**

Strict deadlines for each part of the Capstone are listed below. Due to the amount of Capstone work involved across the short 10-week period, you must be able to meet all deadlines. If you fall behind on any activity, including Capstone drafts, you will only be granted an extension of two days at the most—no exceptions, regardless of the reason. Thus, you must purposefully build time into your schedule to successfully pass your Capstone. There are no exceptions to this timeline policy, so before deciding to do the Capstone, you must be certain that you can commit the time and effort needed to produce the high-quality, graduate-level work required on time.

Timing	Activity	Assignments Due	Live Session Meeting
One quarter before the LIS 4901 Capstone course begins	<ul> <li>OPTION 1: You are collecting data from human participants</li> <li>You must meet with your Faculty Advisor and Capstone Supervisor to begin creating your Project Plan and completing your IRB Application. You must also finish CITI Training before the IRB Application can be submitted.</li> <li>OPTION 2: You are not collecting data from human participants</li> <li>You must meet with your Faculty Advisor and Capstone Supervisor to begin creating your Project Plan only. No IRB Application or CITI Training is needed.</li> </ul>	OPTION 1:  1. Project Plan completed before Week 1  2. CITI Training completed before IRB Application submitted  3. IRB Approval granted before Week 1  OPTION 2:  1. Project Plan completed before Week 1	N/A
Week 1	Live Session #1	Project Plan	Yes
Week 2	<ul> <li>Independent Work</li> <li>Capstone Supervisor Meeting #1</li> </ul>	N/A	No
Week 3	Live Session #2	Draft #1	Yes
Week 4	Independent Work	N/A	No

Week 5	<ul> <li>Independent Work</li> <li>Capstone Supervisor Meeting #2</li> </ul>	N/A	No
Week 6	Live Session #3	Submit Exit Essay to your Capstone Supervisor (see p. 14)	Yes
Week 7	Independent Work	N/A	No
Week 8	Independent Work	Draft #2	No
Week 9	Independent work	Draft Peer Feedback	No
Week 10	Live Session #4	Capstone     Presentation     Final Capstone     Paper	Yes

#### **HOW TO START**

## **Locating and Reading Literature**

Tracking down and reading the relevant literature is the first step toward writing a good project. During your research, you will likely consult at least 25 books, book chapters, and/or peer-reviewed journal articles. You are expected to have reviewed the relevant journal articles and conducted a bibliographic search from print-based and/or electronic abstracting databases. You should not rely on your Capstone Supervisor to point you to the relevant literature on your topic or research question because a part of this experience is to build skills as a competent researcher and a proficient reader and writer of research.

You are best advised to begin this work as soon as possible, and certainly well before the start of the quarter. Even though we have great library resources at the University of Denver, some key resources may not be immediately available. Thus, you may need to request some materials and resources from interlibrary loan, which can take time, depending on the item(s).

## **Drafting**

As you become more familiar with your topic, you will begin to formulate your assessments of current evidence and develop your arguments. A mere report of other scholars' ideas and theories, however well organized, does not make a good research paper. Your study must have an argument, that is, a logical progression from a question to a (tentative) answer.

Your aim, then, is to evaluate ideas and evidence, raise new questions, examine these questions systematically and coherently, and draw well-justified conclusions based on what you found. You are not required to propose a revolutionary new theory or provide conclusive evidence to support a particular position. Nevertheless, you are expected to undertake carefully considered inquiry using appropriate research methods, which will allow you to draw conclusions and indicate the limitations of your inquiry and, where appropriate, how other scholars might research your question more fully than you have.

## **Revising and Proofreading**

A Capstone Paper should have a tight, coherent structure while showing in-depth knowledge of the topic and the development of logical arguments leading to careful conclusions. It must also follow the strict organization and referencing conventions of APA. You should be meticulous about clarity of expression, grammar, English language mechanics, and data presentation.

Most of us do not proofread our work very well, so ask somebody else to help you proofread your final version.

#### **CAPSTONE PAPER FORMATTING**

Your Capstone must be organized as follows:

# 1. Title Page

Your title page should give the title of your study, your name, the words "Library and Information Science Program: Capstone Project", the submission date, and the name of the Capstone Supervisor who oversaw your work.

## 2. Abstract

Your study is a contribution to thinking in your chosen field. For this purpose, a summary of your study (250 words max) will allow your readers to understand your approach and your conclusions. The usual structure for an abstract is given below:

#### i. Aim

What the study sets out to do

## ii. Background

The context and rationale for the dissertation

#### iii. Procedure

How the study is organized; what it covers

#### iv. Method

The approach or methodology used in the study

# v. Findings

The key findings of the study

#### vi. Conclusions

The principal conclusions or recommendations

#### b) Table of Contents

The Table of Contents gives your reader a quick guide to what is in your Capstone Paper and how it is organized. It should contain the title of each of your sections, along with appropriate page numbers.

## c) **Introduction**

Your Introduction is where you set out in detail what your Capstone Paper is about. It is also where you discuss your reasons for conducting this study. In other words, the Introduction defines the study. For that reason, it is sometimes the last thing—along with the Abstract—that you finalize; it needs to be written based on the knowledge of what you have discovered in your study.

#### It must contain:

- A description of what you are going to do
- A justification and description of your methods (i.e., how you intend to proceed)
- a discussion of why it is important

## d) Literature Review

Your Literature Review is where you provide an integration and synthesis of previously published literature on your topic and related to your research question(s). The purpose of the Literature Review is to tell your readers, by paraphrasing in your own words, what the prior literature says about your topic and related issues. Do not rely on direct quotes; some are fine but should be used sparingly. Instead, look for patterns, themes, arguments, similarities, and differences across the literature and use your words to paraphrase the points and arguments you wish to make.

#### e) **Methods**

Your Methods section is where you state your research question(s) and provide the details of how you conducted your study. This section must be written with extreme detail so that readers know exactly how your study was performed.

## f) Results

Your Results section is where you provide your study's findings. This section should contain only the findings, not any explanation, interpretation, or meanings related to them. The goal is to stick to reporting the facts of what you found.

## g) **Discussion**

Your Discussion section is where you elaborate on your results, providing explanation, interpretation, and meaning related to what you found.

NOTE: In some cases, combining your separate Results and Discussion sections into one section is appropriate. Consult your Capstone Supervisor about this.

## h) **Conclusion**

Your Conclusion is where you draw together the results of your inquiry. What have you discovered in the process, and why is it significant? Do not use your conclusion just as a space to repeat what you have already said. While it's fine to reiterate your study's results, you should also consider their wider implications.

## i) References

The writing style you will use for your Capstone Paper, including the formatting of your citations and references, is APA 7th ed. It is advisable to purchase a copy of the most recent edition of the official APA manual and consult it regularly:

Publication Manual of the American Psychological Association: The Official Guide to APA Style (7th ed). (2019). APA.

# j) Appendices (optional)

In consultation with your Capstone Supervisor, you may append supplementary documents applicable to your study, such as a survey instrument, interview questions, computer code, data, etc.

## **Document Formatting Guidelines & Writing Expectations**

You should follow APA guidelines when formatting your Capstone Paper. Attention to detail is essential.

- 1. Your Capstone Paper must be double-spaced throughout, except for:
  - o Block guotes (follow APA guidelines for these)
  - o Table content, including table captions (follow APA guidelines for these)
  - o Figure captions (follow APA guidelines for these)
  - References (can be double- or single-spaced)
  - Appendix content (follow APA guidelines for this)
- 2. You must use a 12-point standard font (e.g., Aptos, Arial, Calibri, or Times New Roman)
- 3. Your pages must be numbered
- 4. Your margins must be 1" all around on every page
- 5. Do not use any footnotes. If something is worth saying, find a way to include it in the body of the text
- 6. In-text citations must be accurate in APA 7th ed. style. All citations must correspond to their end-text references.
- 7. End-text references must be accurate in APA 7th ed. style. All references must correspond to their in-text citations.
- 8. Your Capstone Paper must be well-written using sophisticated scholarly English language. Successful scholarly writing is demonstrated by:
  - Presenting ideas clearly, showing sufficient evidence for statements and claims made, and engaging in convincing argumentation
  - Writing in clear sentences and well-organized paragraphs using correct English grammar, punctuation, and mechanics
  - Paying attention to detail and applying rules of writing—including punctuation, capitalization, verb tense, etc.—correctly and consistently
  - o Organizing writing with sections, headings, and subheadings as appropriate
  - o Formatting documents to appear professional and with minimal errors
  - o Using thorough and correct APA 7th ed. style
- 9. Finally, and following APA, you must:

- Avoid offensive language
- o Ensure confidentiality when referring to human participants if you have them
- Avoid plagiarism

The final version of your Capstone will be passed through Turnitin to detect plagiarism using the system's "similarity score." The Capstone Supervisor will investigate any high similarity scores. If the score on your submission is high, and the Capstone Supervisor detects plagiarism upon investigation, you will be contacted to discuss a course of action that may include receiving an "F" on the Capstone Paper, an "F" in the Capstone course, and/or expulsion from the MLIS program.

## PRESENTATION GUIDELINES

As with your document, you should prepare and deliver a professional-quality presentation. The Capstone Syllabus provides details for the presentation.

The typical organization of the presentation will follow the structure of the Abstract. However, it is also typical to allot more time to the Results and Discussion than the time allotted for the other components. Your presentation must have:

## a. **Purpose**

What does the study set out to do and why was this study needed?

## b. Background

What is the context for this study?

#### c. Methods

What is the methodology of the study?

#### d. Results

What are the key findings of the study?

## e. Discussion

What do the findings mean?

## f. Conclusion

What conclusions or recommendations can be made based on the results?

#### **ASSIGNMENTS AND GRADING**

Assignment	Points	% of Grade	Due date
Live Session Attendance	100	5%	Weeks 1, 3, and 6
Project Plan	100	5%	Week 1
Capstone Supervisor Meeting #1	100	2.5%	Week 2
Capstone Draft #1	100	10%	Week 3
Capstone Supervisor Meeting #2	100	2.5%	Week 5
Exit Essay	100	15%	Week 6
Capstone Draft #2	100	10%	Week 8
Draft Peer Feedback	100	10%	Week 9
Capstone Presentation	100	10%	Week 10
Final Capstone Paper	100	30%	Week 10
TOTAL =	1,000	100%	N/A

#### **CAPSTONE PAPER GRADING GUIDELINES**

As a general guideline, broad descriptors for grading the Capstone Paper are given below.

#### A-Grade Criteria

- An independent perspective on knowledge and understanding is provided
- An in-depth and balanced discussion of the question addressed, as evidenced by the references list, is demonstrated
- Argumentation and analysis, with all stages in the argument supported by carefully evaluated academic evidence, is consistent
- A critical stance about knowledge and understanding is demonstrated; in particular, the limitations
  of claims should be recognized, and there should be evidence that alternative views and
  approaches have been critically evaluated
- How conclusions are reached is clearly shown
- The inquiry itself is conducted rationally and systematically
- Only an absolute minimum of technical errors in grammar, spelling, punctuation, and APA formatting is present

## **B-Grade Criteria**

- A research question or questions for investigation is/are clearly stated and supported by a rationale
- The exposition may be orthodox and derived from established academic sources, but it still provides representative coverage of the literature, as evidenced by the references list
- Although argumentation may lack detail, it still provides a coherent basis for addressing the research question(s) for inquiry and leads to investigation using broadly appropriate methods
- Evidence is clear that research methods have been selected taking into consideration issues of reliability, validity, and ethics
- Despite some digressions and irrelevancies, the inquiry sheds some light on the research question(s) addressed, and the discussion of findings is linked to the theoretical rationale
- The limitations of the inquiry are addressed, leading to specifications for further research and development, demonstrating some understanding of how to undertake an independent investigation
- There may be some technical weaknesses, such as errors in grammar, spelling, punctuation, and APA formatting, but these should not significantly impede the reader

## NOTE: A grade below C will not qualify your Capstone for approval as a degree requirement.

#### **C-Grade Criteria**

- A research question or questions for investigation is/are stated and largely relate to the rationale
- The exposition is orthodox and mainly derived from established academic sources, and while the literature coverage is adequate, some key texts are missing
- The argumentation lacks sufficient detail, but there is a basis for addressing the research question(s) for inquiry, and the methods used are broadly appropriate
- There is little evidence of an awareness of methodological issues concerning reliability, validity, and ethics
- Despite digressions and irrelevancies, the inquiry still sheds some light on the research question(s) addressed, and the discussion of findings is still linked to the theoretical rationale
- The limitations of the inquiry are only partially addressed but still demonstrate some understanding of how to undertake an independent investigation
- There are weaknesses, such as technical errors in grammar, spelling, punctuation, and APA formatting, which impede the reader

## **D-Grade Criteria**

- The study succeeds in identifying the issues implied by the title but does not explore them in depth
- The structure is adequate to outline an argument, but there are major discrepancies, digressions, and irrelevancies in investigating the issue(s) at stake; in particular, a coherent progression from the rationale to the research question(s) to the investigation and the conclusions is absent
- Key sections of the paper (e.g., literature review, methods, discussion, etc.) are missing or very limited in detail
- A critical perspective on the knowledge and ideas presented is lacking
- The level of debate is superficial and predictable, with little evidence of intellectual engagement with the research question(s) chosen
- Much of the content is derivative, typically based on general textbooks

#### F-Grade Criteria

- Failure to listen to and/or follow the direction of the Capstone Supervisor
- Failure to turn in assignments and complete activities on time according to the due date schedule
- The study neither succeeds in identifying the issue(s) implied by the title nor explores it/them in any depth
- The structure is inadequate to outline an argument, but there are major discrepancies, digressions, and irrelevancies in investigating the issue(s) at stake; in particular, a coherent progression from the rationale to the research question(s) to the investigation and the conclusions is absent
- Key sections of the paper (e.g., literature review, methods, discussion, etc.) are missing entirely
- A critical perspective on the knowledge and ideas presented is lacking
- The level of debate is likely to be superficial and predictable, with little evidence of intellectual engagement with the research question(s) chosen
- Much of the content is derivative, typically based on anecdotes and non-academic sources

## **Incomplete Grade**

Incompletes are only considered for students with documented extenuating circumstances as decided by the Capstone Supervisor and Faculty Advisor on a case-by-case basis. Students who have emergencies during the quarter, such as illness or family emergencies, should notify their Capstone Supervisor immediately and not wait until the end of the term. For more information, consult the DU's Office of the Registrar's Incomplete

## Policy.

#### **EXIT ESSAY GUIDELINES**

15%, Due Week 6

The goal of the Exit Essay is for students to reflect on the knowledge and skills gained throughout the graduate program about the program's learning outcomes. For each student learning outcome listed below, provide a brief statement describing your achievement of that outcome. You might provide specific examples for each outcome, such as an assignment or other learning experience in the context of classes taken in the program. You might also feel that you have not achieved a particular outcome; in this case, please analyze why you think so. Please do not omit any outcomes. There is no prescribed page length. A short paragraph for each outcome is sufficient. The LIS program will use these essays for program assessment.

# **Student Learning Outcomes**

- 1. Develop an understanding of historical, present, and emergent aspects of LIS and their effect on current practices.
- 2. Use LIS **professional values and ethics** for the development of inclusive, accessible, and equitable **services**, **programs**, **and resources** in libraries, archives, and other information organizations.
- Safeguard intellectual freedom and resist censorship irrespective of personal views and political agendas.
- 4. Advocate for and facilitate equitable and open access to information.
- 5. **Engage communities** within and outside of LIS organizations based on the principles of professional **empathy, equity, inclusion, and accessibility**.
- 6. Develop the skills to communicate effectively and with cultural humility in diverse professional and community settings.
- 7. Communicate the value of **foundational**, **digital**, **and information literacy** for informed citizenry and inclusive societal participation.
- 8. Demonstrate a commitment to **lifelong learning and service** to communities and the LIS profession.
- 9. Acquire foundational knowledge of administration and management of diverse information organizations.
- 10. Apply the fundamental principles of **information organization and access** in various formats and environments, emphasizing digital information and resources.
- 11. Become proficient and ethical educators, managers, and creators of technology and data.
- 12. Engage in the critical evaluation and production of basic and applied **research**, supporting the values of research-to-practice and knowledge advancement.