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INTRODUCTION

Overview

Welcome to the Honors Program Capstone Project Proposal and Final Report guide. We developed this guide to help Honors Program students navigate the proposal and final report process. This document reviews the various traditional and non-traditional capstone projects, provides an overview of the capstone project proposal and final report forms and templates, provide an overview of the capstone project proposal and final report submission process and review deadlines, and provides the expected formatting and organizational structure for proposals and final reports. At the end of this document is an appendix with relevant capstone project forms and templates.

As you start the capstone project process, please review this document completely and carefully. It is our expectation that this document will provide clear instructions on what is expected of students in the Honors Program regarding proposal and final report format, organization, and structure. This document also lays out the process in which student’s capstone project documents will be submitted and reviewed. Please feel free to contact the Honors Program with any questions regarding this document or the preparation and submission of your documents to the Honors Program.

Students and mentors also may wish to refer to a plethora of guidebooks relevant to their field on more details about how to construct proposals and final reports/theses. This document relies on one such source, “The essential guide to doing your research project” (O’Leary 2017). Furthermore, students and mentors also may find the Honors Program Handbook 2021-2022 (Honors Program 2021) and the Capstone Project Mentors Handbook (Honors Program 2021) useful references. Please note, while there are overlaps in forms between the Honors Program Handbook, the Capstone Project Mentors Handbook, and this document, the actual appendix numbering or lettering may be different between the various handbooks.

University Libraries Note

The honors program highly recommends that students visit the university libraries web site and visit with a library staff member regarding their capstone projects. The university libraries have extensive resources and search engines for students to help with their capstone projects. Furthermore, the libraries staff are an invaluable resource to help honors students with their capstone project literature reviews and resource needs. All Clarkson Honors and Masters Theses and Doctoral Dissertations are available in print in the library and are listed in KnightCat, the library catalog.
Reference Manager Note

The honors program also highly recommends students employ the use a reference manager. Reference managers are highly efficient for building references databases, for importing and exporting citations from search engines, adopting citations and reference list styles, and integration with word processors for in-text citations and bibliographies. There are a variety of free and subscription references available through a google search of “reference managers software” however the honors program has pleasant experience the free software of Zotero that integrates with google scholar and MS Word. However, students and mentors should explore other options based on recommendations, preferences, and price tags.

TYPES OF CAPSTONE PROJECTS

Overview

For most Honors students, completion of the Honors Capstone Project will be the apex of their college careers. Working on a capstone project provides ways of developing their ability to investigate a problem and to do conduct individualized critical reading, writing, and analysis work that will help them in their professions, society, and personal lives. Through this process, students develop the self-knowledge and initiative essential to meet future challenges. Students will discover new ways of organizing time, managing stress, and synthesizing the ideas and thoughts that they develop over months rather than weeks (which is typical of other undergraduate courses).

Though the capstone project work may begin before the third year, the capstone experience requires scholarly maturity and makes an authentic contribution to the field and personal development. Overall performance in the Honors Program Capstone should demonstrate that the student has learned how to engage in a substantive scholarly undertaking that could continue to the advanced degree level, in a professional environment, or in society. This work is not meant to be equivalent to an MA thesis -- it is advanced undergraduate-level work and should be developed and assessed as such. Furthermore, the Honors Program curriculum has set aside a total of 6 credits in HP 390 and HP 490, roughly equivalent to 270 hours of effort towards the inception to completion of Capstone Project and associated proposal and final report. The capstone project should reflect only the student's own scholarly activity or their individual contribution to a collective project, which should be assisted via mentorship.

Furthermore, the honors program student must write capstone proposals and reports themselves, only garnering feedback from peers, mentors, and instructors. **Moreover, a copy of a multi-authored publication is not acceptable as a capstone report.** Writing a capstone project is a challenging task, but it is also rewarding. The experience will allow students to emerge with the confidence and ability to be successful in graduate-level scholarly activity or fast-track professional careers. In addition to independent work, the project involves a close relationship between the student and the capstone project mentor. Such sustained interpersonal interaction
contributes to the quality of the experience and in many cases; the mentor provides advice and
assistance that can help students realize personal and professional success beyond the capstone
project.

All Clarkson University Honors Capstone Projects are automatically deposited in the
University Libraries and available in print in the library and listed in the catalog. However, students
or mentors may request a moratorium on or withholding of automatic deposition or after automatic
deposition, students may submit a written request to the library to remove the report from
circulation and the catalog.

Listing and Description of Types of Capstone Projects

Traditional Capstone Projects

Below is a listing of the traditional capstone project types with a brief description of each. Please note that throughout this document we provide descriptions of both general and specific outlines and descriptions of the acceptable formats based on the field of study of the capstone project.

Business Plan Projects

A business plan is a document that sets out a business’s future objectives and strategies for achieving them.

Creative Projects

Creative projects involve the implementation of the students' imagination or original pieces of work for a product. These may include authoring a novel, screenplay, services of poems, plays, short stories, or music, creating a portfolio of paintings, photographs, digital movies, making a documentary or file, installation of a sculpture or museum exhibit, creating a website or application, making a board game or video game.

Descriptive or Historical Projects

These projects include studies in which information is gathered without manipulating the environment and are typically done through reviewing the literature or obtaining artifacts from collections or sources. Examples are literature reviews or historical projects.

Engineering Design Projects

The engineering design process is a highly iterative process that often includes basic sciences, mathematics, and engineering sciences that may include the common stages of research, design requirements, feasibility, concept generation, preliminary design, detailed design, and production planning.
Qualitative Research Projects

Qualitative research is the process of collecting, analyzing, and interpreting non-numerical data, such as language. Qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them.

Quantitative Research Projects

Quantitative research is referred to as the process of collecting as well as analyzing numerical data in a laboratory or in the field. Quantitative research is used to find patterns, averages, predictions, as well as cause-effect relationships between the variables being studied. Quantitative research projects include experimental, observational, and descriptive quantitative studies such as controlled “laboratory” experiments, non-controlled natural “observational” studies, and descriptive observations that collect numerical data.

Alternative (Non-traditional) Capstone Projects

Below is a description of the two alternative capstone projects and their general expectations. These include the honors internship/co-op capstone project and the honors signature work capstone projects.

Honors Internship/Co-Op Capstone Projects

The Honors Co-op/Internship capstone project is an alternative capstone project for the Honors degree at Clarkson University for students who are on a university approved co-operative education assignment during the junior and/or senior year or who will be doing a full-time (external to Clarkson University) summer internship. To qualify for an Honors Co-op/Internship Capstone, the external-to-Clarkson University work experience must be 10+ weeks at 35-40 hours/week (full time) for a minimum of 350 documentable hours across a continuous period at a single organization. The Honors Co-op Capstone involves the student conducting and evaluating a project while on assignment, which may be a design, technical implementation, managerial intervention, or other form of activity approved by the Honors Program. The project will be under the supervision of the internship / co-op supervisor in which the supervisor must submit a signed Advisor Agreement form. The student must write a capstone project proposal and have it approved by the Honors Program before going on co-op or doing a summer internship. Ideally, the student either does a co-op in the senior year or does the internship in the summer between their junior and senior year so that the student can plan the project during the fall semester and write a proposal during HP 390 in the spring semester of the junior year. Otherwise, the student must complete an honors capstone co-op/internship proposal independently, but prior to the start of the co-op or internship. A complete proposal will be due for review by the Honors administrators, advisors, and proposal reader/evaluator within one month of the start of the co-op or internship. The proposal can take the traditional form or, depending upon the experience, be a detailed co-op/internship plan, which should be developed in concert with an Honors advisor.
Honors Capstone Co-op/Internship Requirements

- External to Clarkson University co-op/internship lasting 10 weeks at 35-40 hours/week (full time) for a minimum of 350 documentable hours across a continuous period at a single organization
- Students must also complete a proposal/co-op plan before or during the first month of the co-op and have it approved by:
  - Internship/Co-op supervisor
  - Honors Program Director
  - Proposal Reader/Evaluator
- Workplace Culture Reflection
- Keep Daily Journal (notebook or electronic)
- Write Honors Capstone Co-op/Internship Project Report

Please note that for some majors the Co-op/Internship capstone project may not allow the student to obtain credit for professional electives, in which case the student is advised to pursue disciplinary research while in co-op or internship instead. For example, an MAE major might research improvements in manufacturing design and an E&M major might investigate an operations management innovation in the workplace. If in any doubt, students should consult with an academic advisor and/or faculty member.

The Co-op/Internship capstone project is written in the form of an Introduction, Descriptive or Technical Report, and Reflective Essay that together form the Honors capstone project.

Honors Capstone Co-op/Internship Workplace Culture Reflection

Workplace Culture: Culture is made up of the values, beliefs, assumptions, attitudes, and behaviors shared by a group of people. Organizational Culture is what happens when a group arrives at a set of rules (generally unspoken and unwritten) for working together.

Understanding the culture you are working in is very important to being successful in both your internship and in future new jobs! Most job candidates and new hires are evaluated for “fit”—how well they mesh with the culture of the organization. In your first week, think about the following aspects of your co-op/internship and in your journal answer the following, which will be useful in your Honors Capstone Project thesis.

Good scientists start with observations—so think about collecting data:

- What objects are on desks?
- What are some behavioral norms? (do’s and don’ts)
- What do people wear?
- How is the space allocated? How much space is given to whom?
- What is posted on bulletin boards or displayed on walls?
- How are common areas utilized?
• How do people interact in meetings? Do they all talk at once, or politely wait for their turn?
• How do people communicate with one another? Is all communication written, or do people communicate verbally?
• What is the tone of messages (formal, informal, short, detailed, pleasant, hostile, etc.)?
• What interaction between employees do you see?
• What groups, if any, are overrepresented or underrepresented in your organization’s staff? What ideas do you have about why this might be the case?
• What language dominates everyday discourse (buzzwords, catch phrases, etc.)
• What do people NOT talk about? (i.e., are certain topics taboo?)
• What emotions do you see? Emotions are indications of values, and can indicate what is important.
• What two people seem to be most important? In what ways do they symbolize the character of the organization?
• Are there identifiable subcultures in the organization? How are they different? Do they seem to be in conflict or in harmony?
• What are the criteria for allocation of rewards and status?
• Are people proud of what they do, or are they serving time?
• Any other observations?

Honors Signature Work Capstone Projects

The Honors Program Signature Work Capstone Project is an option in which the project is: 1) substantial and broad, 2) reflects and demonstrates cumulative and integrative learning across specialized (e.g., major) and general (e.g., general education/common experience, honors curriculum) knowledge, and 3) integrates formal education and informal education (e.g., co-curricular, service, leadership, internship activities). Furthermore, this capstone option connects with issues (problems) in the larger world that correspond with the student’s interest and expertise. Thus, for the student’s signature work project, the student will address one or more local, regional, or global problems that matter to both the student and to society with the goal of producing students prepared to engage modern challenges (AAC&U 2018).

Students developing signature work projects must be responsible for identifying the nature of their project, must draw on multiple components of their education in the project, and must address a “big problem” in which the students apply their learning to real-world issues that matter to society and the student. A key component of the signature work project may be the integration of student experiences with high impact practices (HIP; Kuh and O’Donnell 2013) such as, but not limited to, First-Year Seminars, Common Intellectual Experiences, Learning Communities, Undergraduate Research, Diversity/GLOBAL Learning, ePortfolios, Service Learning/Community-Based Learning, Internship, and Collaborative Projects.
General Expectations/Requirements of Honors Program Signature Work Capstone Project

- The project is substantial in meaning and impact and synthesizes and integrates collective knowledge.
  - The project should be meaningful to the student in that the student identifies the question/topic independently or in collaboration with the instructor/advisor/mentor.
  - The project also applies learning and creates new knowledge.
- The project integrates various elements of the student’s education in the major, co-curricular AND with specific emphasis (i.e., two or more areas) of the general education (common experience/honors) curriculum of professional experience, professional requirement/ethics/diversity, knowledge areas (Contemporary and Global Issues, Cultures and Society, Economics/Organizations, Imaginative Arts, Individual and Group Behavior, and Science and Technology), service, leadership, and technology requirements.
- The student will communicate why the project is meaningful and impactful via reflective (metacognition) components.
  - The project is reflective of one or more of (a) the nature of knowledge and inquiry in the three domains of cognitive (factual, conceptual, procedural, meta-cognitive knowledge), affective (attitudes), and psychomotor (skills) domains (Kraftwolk 2002); (b) self-awareness and connection with others; (c) the relationship of individuals to a community. This will be demonstrated through appropriate forms of reflection on learning that illustrate inductive inference.
- Presented at an internal or external conference such as Clarkson’s Research and Projects Showcase (RAPS).
- The written project report meets, honors program, professional, and disciplinary standards and is approved by an independent evaluator.

CAPSTONE PROPOSAL AND FINAL REPORT FORMS AND TEMPLATES

The following forms and templates are associated with the capstone projects and project proposals and reports. Please review these for your understanding and see the associated appendices for the actual forms and templates.

Honors Capstone Project Student Agreement

After student has come to an agreement with a capstone project advisor / mentor, the honors student should review Appendix A with the project advisor / mentor, sign, and submit Appendix A to the Honors Program either as part of HP 390 or prior to taking HP 390 via email to the Honors Program.

Honors Capstone Project Advisor Agreement

After a student has come to an agreement with a capstone project advisor / mentor, the honors student should review Appendix A with the project advisor / mentor, sign, and submit
Appendix A to the Honors Program as stated above. The student and advisor / mentor should also fill out Appendix B, the Agreement to Serves as Advisor for Capstone Project, and the advisor should sign the document. The honors students should either submit the completed and signed Appendix B either as part of HP 390 or prior to taking HP 390 via email to the Honors Program.

**Capstone Proposal and Final Report Cover Page**

As part of the submission process for both the capstone project proposal and the final report, students must fill out and submit Appendix C, the Capstone Proposal and Final Report Cover Page. On this cover page, student and mentors may choose to identify potential independent reviewer/reader as part of the proposal and final report approval process.

**Capstone Proposal Review Form**

Students and capstone project advisors that are pursuing capstone projects should review Appendix D, the Capstone Proposal Review Form, for familiarity. This form will be sent to an independent reviewer who will read the proposal and use this form to evaluate the proposal. If the independent reviewer requests their comments to be addressed, the student and capstone project advisor prior to the proposal being accepted by the honors program must address these. Acceptance of the proposal is a requirement of the honors degree and must be completed prior to graduation.

**Capstone Proposal and Final Report Title Page Template**

Appendix E is a title page template for both proposal and final report. This serves as the first official page of the proposal or final report. In addition to being a included page of the proposal or final report, students should also make a single page title page for submission of the final report for signatures.

**Capstone Project Final Report Review Form**

Students and capstone project advisor(s) should review Appendix F, the Capstone Project Final Report Review Form, for familiarity. This form is sent to an independent reviewer who will read the final report and use this form to evaluate the proposal. If the independent reviewer requests their comments to be addressed, the student and capstone project advisor must address the reviewer concerns prior to the final report being accepted by the honors program. Acceptance of the proposal is a requirement of the honors degree designation and must be completed.

**Response to Capstone Project Proposal and Report Evaluation Form**

Students and their capstone project mentors may need to address comments or concerns from the proposal and final report evaluations/reviews. In addition to making changes in the proposal or report, we ask that the students and mentors document their changes in the Review
Response Form found in Appendix G and submit this form along with their revised proposal or report. The purpose of this document is for both tracking of changes in the document and compliance to ensure expedited processing and any subsequent reviewing of revised documents by providing documentation for the students, mentors, reviewers, and honors program staff.

**University Libraries Student Copyright License Requirement Information and Form Link**

Honors Capstone Project Reports are automatically deposited into the Clarkson University Libraries and are cataloged and made searchable in the library’s discovery tool. As part of the automatic processing and deposition of an Honors Program Project Report into the University Libraries, students must submit a copyright form (next paragraph has specific instructions). Copyright protects a work the moment it is created in a tangible form, regardless of whether the author or creator registers a copyright with the government. In general, copyright in the United States, for works created today, lasts for seventy after the death of the author. Corporate authors have copyright protection for 95 years from the date of publication, or 120 years from the date of creation, whichever expires first. Once copyright protection expires, a work enters the “Public Domain.” However, according to Copyright.gov, a work does need to be registered to bring a lawsuit for copyright infringement. To register a copyright with the U.S. government, see “Registering a Copyright with the U.S. Copyright Office.”

Please go to the Student Copyright License section of the University Libraries web page, URL link below, to access the Student Copyright License Form and to review the information has regarding what this licensing means and what do the various sections of mean. Please fill out this form and submit it as part of your final submission. Please feel free to contact Lisa Hoover, Public Services Librarian, University Libraries at lhoover@clarkson.edu or 315/268-3760 for questions or additional information.

https://sites.clarkson.edu/library/copyright-basics/clarkson-student-copyright-licenses/

**University Libraries Deposition Moratorium and Withholding Form**

As mentioned previously, Honors Capstone Project Reports are automatically deposited into the Clarkson University Libraries and are cataloged and made searchable in the library’s discovery tool. However, if students or mentors wish to have the deposition of the Honors Capstone Project Report delayed (moratorium) for 1-3 years or have the report withheld from deposition, you may request this through the Library Deposition Moratorium and Withholding Form (Appendix H). Please note, authors can make written requests to have their works removed from the collection at any time.
Confidentiality of Information

Students sometimes complete a capstone project on an internship or co-op, or otherwise cooperate with private companies or governmental organizations, and these external partners may request confidentiality of proprietary information. Also, sometimes a project completed on campus may be undergoing adaptation for publication and authors may wish to request a delay in release of the capstone project.

In this case, the Honors Program will provide a signed confidentiality agreement committing staff to comply with professional confidentiality procedures. Typically, this means that draft and final copies of the capstone project will be marked as “Confidential” and made available only to the appointed Reader and the Director of the Honors Program. Both the Reader and the Director will sign the confidentiality agreement, and the capstone project will not be provided to the library or distributed to others for a specified length of time. A sample confidentiality agreement is presented in Appendix I of this document.

Human Subjects (IRB) Approval

Clarkson University maintains an Institutional Review Board (IRB) with the mandate of protecting the rights and welfare of humans who participate in research. All activities related to research on human subjects must initially be reviewed and approved or exempted by the Clarkson University IRB whether they are conducted by faculty, staff, assistants, students, or any other research collaborator. If your research involves human subjects (for definitions see CU Human Research Protection Program Manual), you will need to take the CITI Human Subjects Research Training Course (see CITI Training on the Clarkson Intranet), and prepare your IRB protocol using the official form according to the guidelines provided. Your materials should be submitted to the IRB Administrative Assistant, CU PO Box 5630, or at irb@clarkson.edu.

Use of Materials Copyrighted by Others

Students may use a variety of materials in their Honors capstone project, including quotations, tables, diagrams, photos, screenshots and even videos or music recordings. You do not need permission to use works in the public domain (works on which a copyright never existed or on which copyright has expired), but you must acknowledge such works and provide an appropriate citation. To determine if a work is in the public domain, go to the following website:

https://copyright.cornell.edu/resources

If you use copyrighted works, refer to Section 107 of U.S. Copyright law, otherwise known as the fair use doctrine. The fair use of a copyrighted work, including such use by reproduction, for purposes such as criticism, comment, news reporting, teaching, scholarship, or research, is not an infringement of copyright. Again, you must acknowledge the source of the content. In determining whether the use of a work in any case is a fair use the factors to be considered shall include:
- the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- the nature of the copyrighted work;
- the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- the effect of the use upon the potential market for or value of the copyrighted work.

All four factors must be considered when conducting a fair use analysis. Please use the Fair Use Checklist in making a fair use determination:

https://copyright.columbia.edu/basics/fair-use/fair-use-checklist.html

If the use does not qualify as a fair use, you may not include the material without written permission of the copyright holder. You are solely responsible if you violate copyright law; neither the Honors Program nor Clarkson University will be held liable.

CAPSTONE PROPOSAL AND FINAL REPORT SUBMISSION PROCESS AND REVIEW DEADLINES

Below are tables that include typical proposal and final report deadlines that are associated with the standard practice of students on a 4-year graduation plan and are enrolled in HP 390 and 490. These tables also reference alternative scenarios outside of HP 390 or 490 for those students graduating early, studying abroad, or on Co-op.

Typical Proposal Deadlines

Most students enroll in HP 390 for the capstone project proposal development and the HP 390 students follow the schedule of the course (Table 1). However, in the cases of class conflict, study abroad, co-op, and early graduation, some students may choose to work on their own or enroll in HP 391 for 3-credits and work with the HP 390 instructor or a designated Honors Program staff member on the proposal documents.

Typical Final Report Deadlines

Most students enroll in HP 490 for the capstone project final report development and follow the schedule of the course (Table 2). However, in the cases of class conflict, study abroad, co-op, and early graduation, some students may choose to work on their own or enroll in HP 491 for 3-credits and work with the HP 490 instructor or a designated Honors Program staff member on the final report documents.
### Table 1. Activities and academic year (i.e., fall and spring semesters) due dates for proposal completion deadlines for students enrolled in HP 390 and for students not enrolled in HP 390 (or working on proposal in the non-spring semester)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Students Enrolled in Spring HP 390</th>
<th>Students Not Enrolled in SP HP 390 but Working on Proposals During non-SP semesters</th>
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<td>Student Agreement</td>
<td>February Class Deadline</td>
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<td>Mentor Agreement</td>
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<td>Cover Page</td>
<td>Early April Class Deadline</td>
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<tr>
<td>Proposal</td>
<td>Early April Class Deadline</td>
<td>November 1st</td>
</tr>
<tr>
<td>Proposal Review Due</td>
<td>Late April Class Deadline</td>
<td>December 1st</td>
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<tr>
<td>Proposal Revisions</td>
<td>Prior to Final Report Submission</td>
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</tbody>
</table>

### Table 2. Activities and academic year (i.e., fall and spring semesters) due dates for capstone final report completion deadlines for students enrolled in HP 490 and for students not enrolled in HP 490 (or working on proposal in non-fall semester). * For the “Draft Final Report” in HP 490, the draft does not need to be finished, but should include the final formatting and organization with the introduction, literature review, and methods sections from the proposal being updated and revised as necessary and the result and discussion sections (or equivalent depending on the type of project) outlined and taken as far as the student can.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Students Enrolled in FA HP 490 (or not) with early FA Graduation</th>
<th>Students Enrolled in FA HP 490 (or not) with normal Spring Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft Final Report*</td>
<td>October 1st</td>
<td>End of Fall Semester</td>
</tr>
<tr>
<td>Cover Page Due</td>
<td>November 1st</td>
<td>March 10&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Other Forms Due</td>
<td>November 1st</td>
<td>March 10&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Final Report Due</td>
<td>November 1st</td>
<td>March 10&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Final Report Review Due</td>
<td>December 1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>April 10&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Final Report Revisions Due</td>
<td>Last day of classes</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>Final Report Acceptance</td>
<td>Prior to Graduation</td>
<td>Prior to Graduation</td>
</tr>
</tbody>
</table>
EXPECTATIONS AND DESCRIPTIONS OF COMMON PROPOSAL AND FINAL REPORT SECTIONS

For all types of Honors Program capstone project proposals and final reports, there are common sections with content and sub-headers. Below are expectations and descriptions of expected content for the common introduction, literature review, and methodology sections of both the proposal and final report.

Introduction Section

The Honors Program Capstone Project proposal and final report all have an introduction that has three sub-sections (sub-headers) of a statement of the problem, goals and objectives, and significance. Each of these sub-sections should be organized as sub-headers in the proposal and final report. Below are expectations of those sub-sections.

Statement of the Problem Sub-section

The statement of the problem sub-section provides an overview of the issue discussed in the proposal or report as well as providing a background on the issue and who it affects. This section should not be confused with the Goals and Objective section, as the statement of the problem should prepare the reader for your goals and objectives section. It starts with a larger context of the problem and narrows down in scope leading into the goals and objective section. This sub-section is typically 1-3 paragraphs long, can have some overlap with the literature review section, but only to the extent to quickly introduce your reader. There are three goals of the problem statement: 1) put the problem in context (what do we already know?), 2) describe the precise issue that the project will address (what do we need to know), 3) show the relevance of the problem (why do we need to know?).

Goals and Objectives Sub-section

The goals/aims and objectives sub-section of the introduction is a straightforward paragraph that starts out with an overall goal of the project and any associated objectives and is driven or associated with the statement of the problem. The goals and objectives should be clearly stated and make sense to the writer and reader based on the previous statement of the problem section and later literature review and methodology sections.

Depending on the type of project, students may include questions, hypotheses, or products. Students may choose to break this sub-section into multiple paragraphs.

Significance Sub-section

The significance sub-section of the introduction is broken down into two sub-sub-sections (with sub-sub-headers) of the Intellectual Merit (Intellectual/Scholarly contributions) and Broader Impacts (Social contributions).
Intellectual Merit Sub-sub-section

Following the National Science Foundation definition of Intellectual Merit, intellectual merit encompasses the potential to advance knowledge and understanding within its own field or across different fields (National Science Foundation 2018). Thus, in this section, students should identify the intellectual merit of their project keeping in mind that their research does not need to make cosmic contributions but leads to both individual and disciplinary advancements in knowledge and understanding.

Broader Impacts Sub-sub-section

Following the National Science Foundation definition of Broader Impacts, broader impacts are those that benefit society or advance desired societal outcomes. Thus, in this section, students should identify the broader impacts of their project keeping in mind that their research does not need to make cosmic contributions but leads to both individual and society (National Science Foundation 2018).

Literature Review Section

The organizational structure of a literature review is that of an introductory paragraph, a body of multiple paragraphs reviewing the literature, and a concluding paragraph tying your literature review together. The role of the literature review is to serve as a critical review of knowledge, findings, theoretical and methodological contributions (O’Leary 2017). Through this process, the writer will explore a topic, articulate a rationale, inform your study with theory, design or justify methods, and serve as a primary source of information. The introduction, body, and conclusion of the literature review benefits from sub-section headers and organization.

Literature Review Introduction Sub-section

The introductory paragraph of the literature review serves as a transition from the previous introduction section and leads the reader into the body of the literature review. As part of proficient writing practice, at the end of this subsection the writer should tell us where they are going in the body of the literature review sub-section.

Literature Review Body Sub-section(s)

As explained above, a student’s literature review will demonstrate that they are well-informed on the topic, identify the conceptual framework for their understanding of the problem, and provide a temporal-spatial context for the problem and their investigation and execution. Use of sub-headers as organizational outlines is recommended for the body of the literature review.
Literature Review Conclusion Sub-section

The final sub-section of the literature review should include a concluding paragraph that ties together the findings of the literature review to the statement of the problem, the goals and objectives, and significance of the research and leads the reader into the methodology section.

Methodology or Approach Section

All types of projects have some sort of methodology or approach. The goal of the methodology section is to articulate your plan with clarity and detail to convince the readers that your approach is both practical and will lead to credible results based on the goals, objectives, or questions of the project. As an aside, for a proposal this section is written in future tense (even if you have done some or all the work) and for final reports, this section is written in past tense.

The methodology section is organized in chronological order on how the project is to be or was conducted. However, the following sub-sections may be considered, in the order listed, depending on if they are applicable to the project. Ideally these sub-sections would be organized into their appropriate sub-headers.

- **Study Design/Experimental Design/Approach**
  - A paragraph or more providing an overview picture of the methods and timing of events
  - Also, can provide a summary of repeated events
- **Study Area (if appropriate)**
  - In environmental / field work field, a description and delineation of the study area
- **Data Collection Methods or Project Steps**
  - Typically written in chronological order and organized by individual steps, analysis, or experiments
  - Written in enough detail so that the reader evaluates your approach and could replicate the study
- **Methods of Analysis**
  - Explanation of statistic or thematic analysis or other types of analysis of the project data or findings that provides details on how data was analyzed and with which analyses
  - If doing hypothesis driven research, may include restating the hypothesis and how it would be statistically analyzed
CAPSTONE PROJECT PROPOSAL GUIDELINES: FORMATTING, ORGANIZATION, AND CHECKLIST

In this section we outline the required formatting for all proposal documents and the organizational structures for the traditional and non-traditional capstone projects. Please pay attention to the formatting and organization expectations.

Formatting

- **File Type:** MS Word document
- **Margins:** 1 inch on all sides
- **Line spacing:** Double Spaced
- **Indent/Tab:** First line of each paragraph is indented/tabbed either 0.25” or 0.50”
- **Font:** Consistent Serif (e.g., Times, Times New Roman, Georgia, Palatino)
- **Columns per page:** 1
- **Page Numbering:** Bottom center, except first page of each section
  - **Section Number:**
    - Lead (Front matter) section (lower case roman numerals; i, ii, iii, etc.,);  
    - Following body (Intro, Lit. Rev. etc.,) sections (continuous Arabic numbers; 1, 2, 3, etc.,)
- **Page Headers:** Top Center (Last Name, First Initial), except title page
- **Citations and References:** Follow your discipline/field (e.g., APA, MLA, Chicago, Turbian, IEEE, etc.), but be consistent
- **Tables:** Follow the citation style your discipline/field (e.g., APA, MLA, Chicago, Turbian, IEEE, etc.), but be consistent; in general, chronologically numbered legend, legend position on top of table, with standalone legend with source citations if applicable, and table with 3 horizontal lines only.
- **Figures:** Follow the citation style of your discipline/field (e.g., APA, MLA, Chicago, Turbian, IEEE, etc.), but be consistent; in general, chronologically numbered legend, legend on bottom, standalone legends with source citation if applicable
- **Headers and Subheaders:** Use headers and sub-headers generously especially sub-headers to identify sub-sections etc.,

[**FIRST LEVEL HEADER**]
  - 1st Level Headers: Centered, Bolded, ALL CAPITALIZED. The sentence starts on next line, indented.

[**Second Level Header**]
  - 2nd Level Headers: Left Justified, Bolded, First Letter of Each Word Capitalized. The sentence starts on next line, indented.

[**Third Level Header.**]
Organization

The capstone project proposal provides an initial description of the capstone project. Students should not think of it as something that comes before the project begins, but as the completion of the first stage of the project itself. A proposal provides a substantial review of the literature in the field, which helps to frame the research, and often contains preliminary results.

Previous capstone project reports (Theses) are available in at the University Libraries. All Clarkson Honors and Masters Theses and Doctoral Dissertations are available in print in the library and are listed in KnightCat, the library catalog.

Outline of the Traditional Capstone Project Proposal (Bullet point represent headers)

The format varies with discipline and purpose (see previous descriptions and outlines), but in general, it must cover the following categories.

- Title Page (This page should be part of the document and also saved as a separate single page document)
- Abstract/Executive Summary: 200-500 word summary of project
- Table of Contents
- Table of Tables
- Table of Figures
- Introduction
  - Problem Statement: describing the general problem
  - Goals and Objectives: outline specific objectives of the capstone project
  - Significance: document why this is important both intellectually/academically and to society (“broader impact”)  
- Background/Literature Review
  - Conduct a well-organized critical survey of the scholarly literature on the problem
  - Demonstrate that you are well-informed on the topic
  - Identify the conceptual framework for your understanding of the problem
  - Provide a temporal-spatial context for the problem and your investigation/execution
- Methodology or Approach
  - Identify your research questions/hypotheses/challenges
  - Describe in detail how you will answer the questions/hypotheses/challenges
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- Present any preliminary findings/achievements
- Explain how you will analyze/interpret your data or otherwise measure success
- Describe your expected results

**Expected Outcomes**
- Describe the anticipated results of your work
- Identify the implications of your results, both scientific/theoretical and practical/applied

**Preliminary results**
- Describe the work you have already done and what you have achieved

**Logistics**
- Describe any funding or special equipment needs
- Develop a “timeline” including a timeline graph or chart
- Describe any courses that are necessary for developing a curricular background on the capstone project topic.

**List of References**
- Provide a list of scholarly books and articles on the problem
- Format appropriately according to professional guidelines

**Appendices (if applicable)**

For the alternative Honors Co-op / Internship capstone project and Signature Work capstone proposal outlines, please see the next sections. We encourage alternative versions of the proposal and the Honors capstone project appropriate to scholarship in the field. We especially encourage students to consider how they can incorporate experiential learning opportunities such as internships or co-ops into the Honors capstone project: for example, organizational research on a company or evaluation research of an intervention or project.

**Outline of the Co-op/Internship Capstone Project Proposal (Bullet point represent headers)**

- Title Page (This page should be part of the document and also saved as a separate single page document)
- Acknowledgments (optional)
- Abstract/Executive Summary: 200-500word summary of project
- Table of Contents
- Table of Tables
- Table of Figures
- Introduction
  - Statement of Problem
    - Why is obtaining or doing a co-op/internship important in terms of your academic preparation?
  - Co-op/Internship Description
    - Position
      - Posted Position Description
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- Posted position qualifications
- Posted Position Duties
- Posted Position Salary and Benefits
  - Co-Op/Internship Supervision and Teamwork Background
  - Co-Op/Internship Organization Background
- Intellectual Merit and Broader Impacts
  - Intellectual merit
    - General statement on posted growth form experience professionally
  - Broader Impacts
    - General statement on posted or potential growth from experience personally
- Background
  - Reflection on Your Qualifications and Fit
    - Personal and Professional Goals
    - Personal and Professional Characteristics
    - Coursework, Co-curricular, prior experience
  - Application Preparation and Process
    - Narrative on Process (including search, preparation of products, obtaining references, etc.)
    - Include application products (e.g., cover letter, resume/cv) as appendices
  - Interview and Negotiation Process
  - Project Details and Background (if known)
    - Narrative, with cited literature if appropriate, on the nature of the position including any training needed
    - Logistics (relocation needs, preparation, duties, contingencies, timeline)
      - Include an overall timeline (Text and Table/Figure from search to completion)
- Expected Outcome
  - Specific duties skills and knowledge growth
  - Specific professional experience growth
  - Specific personal experience growth
- List of References
- Appendices (if applicable)

Outline of Signature Work Capstone Project Proposal (Bullet point represent headers)

- Title Page (This page should be part of the document and also saved as a separate single page document)
- Abstract/Executive Summary: 200-500 word summary of project
- Table of Contents
- Table of Tables
- Table of Figures
- Introduction
  - Statement of the Problem
o Goals and Objectives
o Significance of Work
  ▪ Intellectual Merit
    ● [the potential to advance knowledge or student learning]
  ▪ Broader Impacts
    ● [the potential to benefit society and contribute to the achievement of specific, desired societal outcomes]
● Literature Review
  o Introductory Paragraph
  o Background of Nature and History of the Problem Component
  o Background on Integration of Student Formal (Major, Honors, and General Education) and Informal (High Impact Practices) Education Component
  o Background on Student Reflection (Metacognition) Component
  o Concluding paragraph
● Methodology/Approach
  o Introductory Paragraph
  o General Approach to Gathering Information
  o Critical Analysis Approach
  o Product Description (optional)
● Logistics
  o Timeline Narrative and Illustration
  o Ethics and Responsible Conduct (optional, if applicable)
  o Contingencies
● Preliminary Results
● List of References
● Appendices (if applicable)

Honors Capstone Project Proposal Checklist (Appendix J)

As you go through the Capstone Project Proposal development phase and prior to submission for HP 390 grading or proposal review/evaluation, please review the checklist for completion of various forms and activities. You can find a copy of the checklist in Appendix J and the Honors Program will have fillable PDF versions as well.

CAPSTONE PROJECT FINAL REPORT GUIDELINES: FORMATTING, ORGANIZATION, AND CHECKLIST

In this section we outline the required formatting for all final capstone report documents and organizational structure for the distinct types of capstone projects. It is impossible to give a fixed rule about the length of an Honors capstone project since modes of discourse vary from discipline to discipline. Students should discuss the expected length of the capstone project with their advisor. To give some idea of what is expected, in the humanities, these average 50-75 pages
in length and consist of two or more chapters. In the social sciences, the manuscript may be shorter, particularly if the project involves more quantitative than qualitative research. In the natural sciences, the manuscript may be shorter still, often taking the form of an extended journal article, with additional material on literature review and methods.

**Formatting**

- **File Type:** MS Word document
- **Margins:** 1 inch on all sides
- **Line spacing:** Double Spaced
- **Indent/Tab:** First line of each paragraph is indented/tabbed either 0.25” or 0.50”
- **Font:** Consistent Serif (e.g., Times, Times New Roman, Georgia, Palatino)
- **Columns per page:** 1
- **Page Numbering:** Bottom center, except first page of each section
  - **Section Number:**
    - Lead (Front matter) section (lower case roman numerals; i, ii, iii, etc.,);
    - Following body (Intro, Lit. Rev. etc.,) sections (continuous Arabic numbers; 1, 2, 3, etc.,)
- **Page Headers:** Top Center (Last Name, First Initial), except title page
- **Citations and References:** Follow your discipline/field (e.g., APA, MLA, Chicago, Turbian, IEEE, etc.), but be consistent
- **Tables:** Follow the citation style your discipline/field (e.g., APA, MLA, Chicago, Turbian, IEEE, etc.), but be consistent; in general, chronologically numbered legend, legend position on top of table, with standalone legend with source citations if applicable, and table with 3 horizontal lines only.
- **Figures:** Follow the citation style of your discipline/field (e.g., APA, MLA, Chicago, Turbian, IEEE, etc.), but be consistent; in general, chronologically numbered legend, legend on bottom, standalone legends with source citation if applicable
- **Headers and Subheaders:** Use headers and sub-headers generously especially sub-headers to identify sub-sections etc.,

**[FIRST LEVEL HEADER]**
- 1<sup>st</sup> Level Headers: Centered, Bolded, ALL CAPITALIZED. The sentence starts on next line, indented.

**[Second Level Header]**
- 2<sup>nd</sup> Level Headers: Left Justified, Bolded, First Letter of Each Word Capitalized. The sentence starts on next line, indented.

**[Third Level Header.]**
- 3<sup>rd</sup> Level Headers: Left justified and indented, Bolded, First Letter of Each Word Capitalized, period at end. Then the sentence starts right after the period on same line.
Organization of Generic Traditional Capstone Project Report Format

All pages must be single-sided, single column, 1-inch margins (excluding header/footer and page numbers only), double spaced, and 12 pt. font for text (illustration fonts can be smaller, but readable). Although the content of the Honors capstone project varies (see specific outlines listed after this generic outline), the following guidelines must be followed:

1) Front matter
   a. Title Page (required): The title page should adhere to the format in the Honors Program Handbook. This page should be part of the document and also saved as a separate single page document. This document does not need to be signed until it has been approved and is ready for “publication.”
   b. Abstract/Executive Summary (required): a 200-500 word summary of
   c. Acknowledgements (optional): If you wish to include an Acknowledgements page this should follow the Title Page. It is customary to thank your capstone project advisor, capstone project reader, family and friends, and anyone whose help and encouragement have assisted you in completing your capstone project. Sources of financial support are also acknowledged. The Acknowledgements page should be paginated using lower-case Roman numerals (i, ii, iii etc.) continuing from the Executive Summary.
   d. Table of Contents (required): You must include a Table of Contents. Page numbers listed in the Table of Contents must correspond with those in the main body of the capstone project. The Table of Contents should be paginated continuing from the Acknowledgements using lower-case Roman numerals (i, ii, iii etc.) continuing from the Acknowledgements.
   e. Table of Tables and Figures (optional): You may include a List of Tables, List of Figures, or a Glossary. These must refer to correct numbers and titles of tables and figures in the main text. These lists should be paginated continuing from the Table of Contents using lower-case Roman numerals (i, ii, iii etc.) continuing from the Table of Contents.
   f. Glossary, List of Acronyms etc. (optional): You may include a Glossary of technical terms or List of Acronyms, or other useful front material if you wish. These lists should be paginated continuing from previous lists using lower-case Roman numerals (i, ii, iii etc.) continuing from the Lists of Tables and Figures.

2) Body (required; e.g., Introduction, Literature Review, Methods, Results, Discussion etc.,)
   Please note, the exact outline of the body will be different for the specific types of projects and those outlines are shown in the next section. In the main body you must follow an
established style manual, which may be one of the main styles (Chicago, Harvard, APA, MLA etc.) or one appropriate to your discipline or even a particular journal. Check with your faculty advisor. You must be consistent throughout. Regular pagination should begin with the first page of your project. The body of the capstone project must be double-spaced throughout, but single spacing is permitted in footnotes, block quotations, and in tables and figures. All tables and figures must be titled and numbered sequentially (Table 1… and Figure 1… etc.). Figure captions should appear below figures while table captions should appear above tables.

3) **List of References** (required): The Bibliography or List of Work Cited must also be double-spaced with regular pagination, and it must be consistent with your chosen formatting style.

4) **Appendices** (optional): Appendices may provide detailed additional information that is not essential in the body of the report but that would be of interest to specialist readers, such as survey instruments, design specifications, and raw data. Appendices are labeled A, B, C, etc. and given a descriptive title. Appendices are not included in the word count.

Outlines of Specific Types of Traditional Capstone Project Reports

**Overview**

Below are the body outlines for the specific types of Traditional Capstone Projects Reports that students should use to modify the generic traditional capstone project report outline listed in the previous section. These specific body outlines are for Business Plan, Creative, Descriptive or Historical, Engineering Design, Qualitative, and Quantitative Projects.

**Business Plan Projects Outline**

Introduction
- 1. Mission
- 2. Business Model
- 3. Strategic Plan
- 4. SWOT Analysis

Organizational Plan
- 1. Administration and Personnel

Marketing Plan
- 1. Marketing Analysis
- 2. Marketing Strategy

Financial Plan
- 1. Financial Needs Analysis
- 2. Projections of Revenues and Profits

Outcomes

Implications and Conclusions

List of References
Creative Projects Outline

Introduction
1. Project Statement
2. Objectives
3. Value

Literature Review
1. Overview of critical literature on form and genre
2. Examination of precedents and influences

Methodology
1. Discussion of technique and how it will be used to achieve aims/effects
2. Challenges and constraints
3. Outline of the mode of presentation

Outcomes
Implications and Conclusions
List of References

Descriptive or Historical Projects Outline

Introduction
1. Problem statement
2. Objectives
3. Scholarly and social significance

Literature Review
1. Relationship of study to related historical/descriptive research
2. Critical analysis of pertinent literature research

Methodology
1. Identification of secondary and primary sources
2. Description of means of interpretation/analysis of resources

Results
1. Presentation of data
2. Analysis of data

Implications and Conclusions
List of References

Engineering Design Projects Outline

Introduction
1. Problem definition (design requirements, specification, and constraints)
2. Objectives
3. Statement of need and social significance

Literature Review
1. Status of the art (review of existing products, solutions, or technologies)

Technical Approach
1. System level description of project
2. Alternative solutions and/or design concepts

Project Management
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1. Tasks and deliverables
2. Timeline
3. Resource needs and/or budget
4. Qualifications

Outcomes
Conclusion
List of References

Qualitative Research Projects Outline

Introduction
1. Problem statement
2. Objectives
3. Scholarly and social significance

Literature Review
1. Relationship of study to related research
2. Critical analysis of pertinent literature research

Methodology
1. Sample selection
2. Data gathering technique
3. Data analysis methods
4. Ethical considerations

Results
1. Presentation of data
2. Analysis of data

Implications and Conclusions
List of References

Quantitative Research Projects Outline

Introduction
1. Problem statement
2. Objectives
3. Scientific significance and broader impact

Literature Review
1. Relationship of study to related research
2. Critical analysis of pertinent research

Methodology
1. Experimental design (include methods and materials)
2. Subjects to be used (if appropriate)
3. Measures used (surveys, interviews, psychological instruments, protocols, etc.)
4. Ethical considerations

Results
1. Presentation of data
2. Analysis of data

Implications and Conclusions
List of References
Organization and Outlines of Non-traditional Honors Capstone Project Reports

Below are the expected organization and outlines for the two non-traditional honors capstone project reports: Internship/Co-op and Signature Work. The formatting, as listed at the beginning of this section, is the same for both the traditional and non-traditional Honors Program Capstone Project reports.

Outline of the Honors Internship/Co-Op Capstone Project

- Title Page
- Abstract/Executive Summary (required)
- Acknowledgments (optional)
- Table of Contents
- Table of Tables (if appropriate)
- Table of Figures (if appropriate)
- Introduction (update of proposals)
  - Statement of Problem
    - Why is obtaining or doing a co-op/internship important in terms of your academic preparation?
  - Co-op/Internship Description
    - Position
      - Posted Position Description
      - Posted position qualifications
      - Posted Position Duties
      - Posted Position Salary and Benefits
    - Co-Op/Internship Supervision and Teamwork Background
    - Co-Op/Internship Organization Background
  - Intellectual Merit and Broader Impacts
    - Intellectual merit
      - General statement on posted growth form experience professionally
    - Broader Impacts
      - General statement on posted or potential growth from experience personally
- Background (update of proposal section)
  - Your Qualifications and Fit (Personal Introduction)
    - Personal and Professional Goals
    - Personal and Professional Characteristics
    - Coursework, Co-curricular, prior experience
  - Application Preparation and Process
    - Narrative on Process (including search, preparation of products, obtaining references, etc.)
    - Include application products (e.g., cover letter, resume/cv) as appendices
    - Interview and Negotiation Process
  - Logistics
    - (Relocation needs, preparation, duties, contingencies, timeline)
○ Project Details and Background
  ■ Organization Introduction
    ● Provide an overview of the company: its history, organization, and the main products/services that it makes/provides
  ■ Position Introduction
    ● Department/Unit Description subheader
      ○ Describe your department(s), its function and how it fits into the organization.
  ■ Position Description subheader
    ● Provide a brief overview of your position title, your supervisor, your assignments or duties, and schedule of activities. You should also provide any other information helpful to the reader by way of background to your project
    ● Include an overall timeline (Text and Table/Figure from search to completion)

● Project Report Section (min. 10 pages).
  ○ The exact contents of the Project Report Section depend upon the nature of the project and can take on descriptive or technical forms (see below). However, the Project Report Section is self-contained, which means it may have its own title page, executive summary/abstract, and citations/literature cite/bibliography sections if appropriate.
    ■ For example, you may choose to submit a descriptive project report, which introduces the internship in the introduction, describes the various activities in the body of the report, which should include illustrations (tables, graphs, figures, etc.) and have a conclusion section.
    ■ Alternatively, you may choose to write the Project Report section more technically in the style suitable for publication in a technical journal and should include appropriate references to sources and diagrams/illustrations.
  ○ NOTE: If your supervisor feels this project report should not be released due to extremely confidential and proprietary content, you will need to have a confidentiality agreement between the company and the Honors Program and Clarkson University.
    ■ Example Descriptive Project Report Style Outline
      ● Title Page
      ● Abstract/Executive Summary
      ● Introduction (introduce co-op/internship organization, job description, job qualification and duties, training/orientation, and timeline). Provide a more detailed (than in overall introduction above) overview of your position title, your supervisor, your assignments or duties, and schedule of activities.
      ● Body (multiple paragraphs describing details and outcomes of duties including orientation, training, and specific duties and outcomes)
      ● Summary
      ● Literature Cited (optional)
    ■ Example Technical Project Report Style Outline
      ● Title Page
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- Abstract/Executive Summary
- Introduction
  - Broader context
  - Literature review
  - Project Goals
- Methods
  - Study/experimental design
  - Experiments/Protocols
  - Data Analysis
- Results
- Discussion
- List of References

- Reflective Essay Section (min. 10 pages): Reflect critically on the work experience, particularly in terms of our personal and professional development by describing the following making sure to use at a minimum the following subheaders:
  - Pre-experience expectations,
  - Co-op/Internship Search, Application, and Interview process
  - Pre- and post-experience relevant to Personal and Professional Goals,
  - Relationship to coursework, co-curricular, and prior experience,
  - Knowledge, Skills, and Training Acquired
  - Degree of Supervision/Responsibility,
  - Personnel Relations and Teamwork Experience
  - Workplace Culture Reflection
  - Difficulties and Challenges Experienced,
  - Personal and Professional Strengths and Weaknesses Discovered
  - Conclusion and Degree of Satisfaction
- List of References (Whole Document). The whole document literature cited includes any literature cited in the document including redundant literature in the technical
- Appendices (if applicable)

Outline of Signature Work Capstone Project Report

- Title Page
- Abstract/Executive Summary (required)
- Acknowledgments (optional)
- Table of Contents
- Table of Tables (if appropriate)
- Table of Figures (if appropriate)
- Introduction
  - Statement of the Problem
  - Goals and Objectives
  - Significance of Work
    - Intellectual Merit
      - [the potential to advance knowledge or student learning]
• Broader Impacts
  ● [the potential to benefit society and contribute to the achievement of specific, desired societal outcomes]

• Literature Review
  o Introductory Paragraph
  o Background of Nature and History of the Problem Component
  o Background on Integration of Student Formal (Major, Honors, and General Education) and Informal (High Impact Practices) Education Component
  o Background on Student Reflection (Metacognition) Component
  o Concluding paragraph

• Methodology/Approach
  o Introductory Paragraph
  o General Approach to Gathering Information
  o Critical Analysis Approach
  o Product Description (optional)

• Signature Work Essay (20 pages target)
  o Introduction
  o Body
  o Description and Links to Products (optional)
  o Signature Work Essay Conclusion

• Overall Conclusion
  o Intellectual Merit of Signature Work
  o Broader Impacts of Signature Work

• List of References

• Appendices (if applicable)

Honors Capstone Project Report Submission Checklist (Appendix K)

As you go through the Capstone Project Report development phase and prior to submission for report review/evaluation, please review the checklist for completion of various forms and activities. You can find a copy of the checklist in Appendix K and the Honors Program will have fillable PDF versions as well
LIST OF REFERENCES


APPENDICES
Appendix A: Honors Capstone Project Student Agreement

Honors Capstone Project Student Agreement

The student is responsible for meeting the capstone project requirements of the Honors Program, which includes the required courses, HP 390 and HP 490, and research, writing, and presentation of the capstone project itself. By signing below, the student acknowledges that he/she understands the requirements as documented in the Honors Program Handbook and agrees to the following:

- I will develop a focused and feasible project to which I am genuinely committed and for which I am properly prepared.
- I will find a faculty advisor to advise me. My advisor should be genuinely interested in me and my project and have demonstrated qualifications to mentor me on my project. I am responsible for securing a signed “Advisor’s Agreement” that is to be submitted to the Honors Program.
- I will be responsible for developing and maintaining a good working relationship with my advisor. I will ensure that my advisor and I have a shared set of expectations about the capstone project research and writing process. We will agree to a schedule of activities and deadlines for completion of the components of my capstone project.
- I will meet regularly with my advisor. I will be on time and come prepared for each meeting. I will have completed assignments and be ready to ask specific questions or engage in particular topics of discussion. If I cannot make a meeting or meet a deadline, I will inform my advisor in advance.
- I will regularly submit reports of my work and drafts of my writing so that my advisor can give me feedback and guidance. I will respect my advisor’s experience and expertise and will be expected to respond positively and promptly to his/her advice. I may disagree and may receive conflicting advice from multiple advisors, and in such cases I will make open and informed choices that I will be able to explain and justify.
- I will respond in a timely fashion to all communications from my faculty advisor and the Honors Program and apprise them of any anticipated problems or changes in my project. Should any breakdown in communication occur or any serious obstacles develop in my capstone project, I will immediately inform the Director of the Honors Program and seek assistance.
- I will conduct research responsibly and ethically. I will not plagiarize nor commit any kind of fraud. I will make clear the distinction between my own original contribution and the work of a team or other individuals. I will cite and document sources, and write quotations, summaries, and paraphrases with care so as to distinguish my ideas and words from those of other writers.
- I will write my capstone project according to the professional standards of my field. My work should be of publishable quality. I will ensure that all drafts of my work are grammatically correct and thoroughly proofread before submitting them for review to my advisor and/or the Honors Program.

Student’s name: ___________________________________________________________

Student Signature/Date: _____________________________________________________
Appendix B: Agreement to Serve as Advisor for an Honors Capstone Project

Agreement to Serve as Advisor for an Honors Capstone Project

Student’s name: _____________________________________________________

Major(s): ______________________________________________

Project title: __________________________________________________________________

_____________________________________________________________________

Advisor’s name: _____________________________________________________

Title: _____________________________________________________________

Department: ________________________________________________________

Email: ________________________________ Phone: ____________________

I am familiar with the instructions for the Honors capstone project included in the Honors Program Handbook and I agree to act as capstone project advisor for this student and to provide guidance as described in the document “Serving as an Advisor for an Honors Capstone Project.”

Signature: _______________________________________________ Date: _____________
Appendix C: Capstone Project Proposal and Final Report Cover Sheet

Capstone Project Proposal and Final Report Cover Sheet
Clarkson University Honors Program

Student Name: ________________________________________________________________

Class: ____________       Major(s): ___________________________________________

Advisor Name: ________________________________________ Title: ___________________

Department: ___________________________________________________________________

Capstone Document Type (Place X mark): ___ Proposal or __ Final Report

Project Type (Place mark one):

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Plan</td>
<td>Creative</td>
<td>Descriptive or Historical</td>
</tr>
<tr>
<td>Engineering Design</td>
<td>Qualitative Research</td>
<td>Quantitative Research</td>
</tr>
<tr>
<td>Internship/Co-op</td>
<td>Signature Work</td>
<td>Other</td>
</tr>
</tbody>
</table>
Appendix D: Evaluation of Honors Capstone Project Proposal

Evaluation of Honors Capstone Project Proposal

Directions for students/REVIEWERS:

- Please complete this section of the form and submit this form as part of your submission package.

Project title:

Student Name: Advisor Name:

Reader/Evaluator Section:

Purpose of proposal review: The objective of this Capstone Project Proposal review/evaluation process is to provide a quick formative rubric review of the capstone proposal. We define formative feedback as feedback highlighting where students can improve their work and provide them with confidence that they are headed towards a successful final capstone final report (thesis) next academic year. However, if reviewers deem that a whole proposal revision is needed, we ask reviewers to identify the general nature of the revisions needed in the comments section provided on the rubric form (or via track changes in the proposal document). Again, we are not expecting extensive developmental, substantive, content, structural, copy, line, or mechanical editing level review, however, we wish for the identification of general areas of improvements via the rubric and/or the comment section of the provided rubric (or track changes in the proposal document).

Capstone Project context for reader/evaluator: Though honors program capstone project work may begin before the 3rd year, the capstone experience requires scholarly maturity and makes an authentic contribution to the field and is typically completed between the 2nd semester of their 3rd year and the end of the 4th year. Overall performance in the Honors Program Capstone should demonstrate that the student has learned how to engage in a substantive scholarly undertaking that could continue to the advanced degree level, in a professional environment, or in society. This work is not meant to be equivalent to an MA thesis -- it is advanced undergraduate-level work and should be developed and assessed as such. Further, capstone projects may fail or garner negative results and still be considered acceptable. The Honors Program curriculum has set aside a total of 6 credits in HP 390 and HP 490, roughly equivalent to 270 hours of effort towards the inception to completion of Capstone Project and associated proposal and final report. The capstone project activity should reflect only the student's own scholarly activity or their individual contribution to
a collective project which should be assisted via mentorship. Further, the capstone report should be completely written by the student, only garnering feedback from peers, mentors, and instructors.

**Reader / FORMATIVE EVALUATOR DIRECTIONS:**

- Please return this form to the Honors Program within 2-4 weeks of receiving the proposal for review.
- Please review the evaluation rubric on the next page prior to reading the proposal. Please note, this rubric is used for both traditional projects and internship/coop projects (Non-traditional).
  - Internship/Coop projects only have the following sections: **Introduction, Background, Expected Outcomes, List of References.** For any rubric section or area that is not applicable to Internship/Coop proposals, please check the “N/A” column
- If you wish to use track changes on the proposal, you may do so, but please indicate on the next page you have used track changes.
- After reading the proposal, please check the appropriate boxes for each rubric component on the next page.
- Should you identify revisions, please indicate these in the comments section below or through track changes in the draft manuscript by providing suggestions for improvement.
<table>
<thead>
<tr>
<th>Component</th>
<th>Exceeds Expectations</th>
<th>Meets Expectations</th>
<th>Revision Needed</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction Section:</strong> Clear statements of an original problem, objectives, and significance (intellectual merit and broader impacts)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Literature Review or Background Section.</strong> Project is properly contextualized within current literature in the field or provides sufficient background for the project</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Methodology (if applicable) Section:</strong> detailed description of project design, steps or processes, data collection or product development, instrumentation, design, statistical, and critical analyses and interpretation, ethical issues, validity and reliability, and limitations of project</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Logistics Section or Area:</strong> Detailed description of logistical components of the project such as timeline, budget, etc.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Expected Results/Outcomes Section:</strong> proposal discusses expected outcomes, anticipating problems and suggesting alternatives as necessary</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Illustrations:</strong> Tables and figures appropriately formatted with complete legends and appropriately references in the text.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Attributions:</strong> appropriate and consistent in text and end references</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Feasibility:</strong> proposal presents a realistic plan for completion of project</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Overall:</strong> Proposal is written according to professional standards in the field including organization, formatting, spelling, and grammar. 1-inch margins, 12 pt. font, double spaced, at least first and second level headers.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Did you use track changes in the proposal document as part of your review? ☐ Yes or ☐ No

Revision Needed Comments Section (If applicable; Use as much space as needed):

Reader/Evaluator Signature Section:

Reader/Evaluator name:

Signature: Date:
Appendix E: Capstone Proposal and Final Report Title Page Template

Clarkson University

>Title

A Capstone Project [Proposal/Report] by

[Your Name]

Department of [Your Department]

Submitted in partial fulfillment of the requirements for a

Bachelor of Science Degree with

University Honors

[Month] [Year]

Accepted by the Honors Program

Advisor ([Name]) Date

Honors Reader/Evaluator ([Name]) Date

Honors Director ([Name]) Date
Appendix F: Capstone Project Final Report Review Form

Capstone Project Final Report Review Form

Directions for student: Complete this section of the form and obtain your advisor’s signature. Submit the signed form and a digital copy of your capstone project to the Honors Program.

Student Name: _______________________________________________________________________

Project Title: _______________________________________________________________________

I’ve read the attached capstone project and approve it for review by the appointed Reader.

Capstone Project Advisor: ___________________________________________ Date: ________________

Reader Section:

Note for reader: Though honors program capstone project work may begin before the 3rd year, the capstone experience requires scholarly maturity and makes an authentic contribution to the field and is typically completed between the 2nd semester of their 3rd year and the end of the 4th year. Overall performance in the Honors Program Capstone should demonstrate that the student has learned how to engage in a substantive scholarly undertaking that could continue to the advanced degree level, in a professional environment, or in society. This work is not meant to be equivalent to an MA thesis -- it is advanced undergraduate-level work and should be developed and assessed as such. Further, capstone projects may fail or garner negative results and still be considered acceptable. The Honors Program curriculum has set aside a total of 6 credits in HP 390 and HP 490, roughly equivalent to 270 hours of effort towards the inception to completion of Capstone Project and associated proposal and final report. The capstone project activity should reflect only the student’s own scholarly activity or their individual contribution to a collective project which should be assisted via mentorship. Further, the capstone report should be completely written by the student, only garnering feedback from peers, mentors, and instructors.

Reader Directions: Please check the appropriate box and return this form to the Honors Program within 2 weeks. Should you require revisions please indicate these in the comments section below or in the draft manuscript and provide suggestions for improvement.

Review Decision:

☐ The draft manuscript will not be reviewed in its present form because it contains formatting, spelling, and/or grammar errors that preclude review of its technical content.
□ Major revisions are required as noted separately (see ________________)
□ Minor revisions are required as noted in the draft manuscript (see ________________)
□ No revisions are required.

Reader Comments Section (Please use as much space as needed):

If revisions are required (Please Check):

□ I am withholding my approval of the written capstone project at this time. I wish to review and approve the corrected capstone project before it is put on display. (Do not sign below)

□ I do not wish to review the corrected capstone project before it is put on display. Providing that the student adequately addresses the editorial comments I have made, I approve the written capstone project for display. (Sign below)

____________________________  ______________________  ____
Reader Name                  Reader Signature         Date
Appendix G: Response to Capstone Project Proposal and Report Evaluation Form

Response to Capstone Project Proposal and Report Evaluation Form
Honors Program
Clarkson University

Student Name:
Document Title:
Type of Capstone Project Document (Check one): __ Proposal or __Report/Thesis
Date of Review:
Date Student Response Submitted:

Concerns and Student Response Addressing Concerns:
Appendix H: University Libraries Capstone Report Moratorium or Withholding Request Form

University Libraries Capstone Report Moratorium or Withholding Request Form

**REASON FOR CAPSTONE REPORT MORATORIUM OR WITHHOLDING (PLEASE CHECK ONE)**

☐ Publication of the capstone project or portions thereof is pending.
☐ Proprietary information is involved.
☐ Other (Please specify) _________________________________________________________

**NATURE OF REQUEST (PLEASE CHECK ONE):**

☐ Moratorium Request until Year: _________ Month: ____________ Day: ______
☐ Withholding

**PLEASE COMPLETE THE FOLLOWING:**

Capstone Project Title:

Printed Student Name: ____________________ Signature: _____________________ Date:

Printed Advisor Name: ____________________ Signature: _____________________ Date:

Printed Director Name: ____________________ Signature: _____________________ Date:
Appendix I: Sample Confidentiality Agreement

Sample Confidentiality Agreement

REASON FOR CONFIDENTIALITY (Please check)

☐ Publication of the capstone project or portions thereof is pending.
☐ Proprietary information is involved.
☐ Other (Please specify) ______________________________________________________

Student Name: _____________________________ Signature: _________________________

Advisor Name: _____________________________ Signature: _________________________

Capstone Project Title: _________________________________________________________

The confidential information shall be used by the Reader appointed by the Honors Program and
the Director of the Honors Program only for the purpose of examination of the capstone project as
part of the requirements of the Honors Program in which the student named above is enrolled. The
Reader and the Director agree to take all action reasonably necessary to protect the confidentiality
of the confidential information by implementing and enforcing operating procedures to minimize
the possibility of unauthorized use or copying of the confidential information.

The confidentiality of this information will be maintained until such a time as capstone project
becomes part of the public domain, which shall be ____________________.

Reader’s Name: _____________________________ Signature: _________________________ Date: ______

Director: [Name] Signature: ______________________________ Date: _______
Appendix J. Honors Program Capstone Project Proposal Submission Checklist

Honors Program Capstone Project Proposal Checklist

Description: As you go through the Capstone Project Proposal development phase and prior to submission for HP 390 grading or proposal review/evaluation, please review the checklist for completion of various forms and activities.

Checklist:

____ “Honors Capstone Project Student Agreement” filled out and signed

____ “Agreement to Serve as Advisor for an Honors Capstone Project” filled out and signed by all signers

____ Capstone Project advisor/mentor review of proposal

____ A separate “Capstone Proposal and Final Report Title Page Template” is drafted by student and submitted as a separate document

____ A complete draft of the proposal in MS Word following the formatting, structure, and organization provided in the “Guide to Honors Capstone Project Proposals and Reports”

____ “Capstone Project Proposal and Final Report Cover Sheet” filled out and signed by all signers

____ “Evaluation of Honors Capstone Project Proposal” form with top filled out by the student

____ An optional “Sample Confidentiality Agreement” is filled out and signed by all signers

Proposal Title:

Student Name:

Student Signature

Date Signed:
Appendix K. Honors Program Capstone Project Report Submission Checklist

Honors Program Capstone Project Report Checklist

Description: As you go through the Capstone Project Report development phase and prior to submission for report review/evaluation, please review the checklist for completion of various forms and activities.

Checklist:

____ Capstone Project advisor/mentor review of the Capstone Project Report

____ A separate “Capstone Proposal and Final Report Title Page Template” is drafted by student and submitted as a separate document

____ A complete ready for review draft of the Capstone Project Report in MS Word following the formatting, structure, and organization provided in the “Guide to Honors Capstone Project Proposals and Reports”

____ A “Capstone Project Proposal and Final Report Cover Sheet” filled out and signed by all signers

____ A “Capstone Project Final Report Review Form” form with top filled out by the student

____ An optional “Sample Confidentiality Agreement” filled out and signed by all signers

____ An optional “University Libraries Capstone Report Moratorium or Withholding Request Form” filled out and signed by all signers

____ A “University Libraries Student Copyright License Requirement Information and Form” filled out and signed by all signers

Report Title:

Student Name:

Student Signature

Date Signed: