Holt High School

Capstone research paper outline guide

This document clearly details the sections that are required to be included in your paper, and gives an explanation about what kind of details should be included in each section. Ideas for optional, relevant sections are also included here. Please refer to this document throughout the capstone project process.

SECTION 1: Title page (required)

This is a single page that includes

- The title of your project
- The title of the course and the name of your school
- The date the paper is submitted
- Your full name

SECTION 2: Table of contents (required)

This is one or two pages that lists each section of your paper and the page on which it begins.

SECTION 2A: Acknowledgements (optional)

The acknowledgments are a personal way for the student writer to thank those who were helpful in the preparation of the project, and may contain appropriate information, written in a professional manner, that the student may wish to share with the reader. There is no word limit, but the acknowledgments must not exceed one page in length. Any quotes listed in this section need to be cited; however, use of copyrighted material in this section is discouraged.

SECTION 3: Abstract (required)

The abstract is a concise summary of the research. It should describe the purpose, importance, results, and conclusions of the research. The abstract is to be written in a scholarly manner. There is no word limit, but the abstract must not exceed one page in length, including keywords. The last sentence of the abstract must start with the word "Keywords:" followed by the academic program [select appropriate academic program and include as written here: STEM, Health, Business, Social Sciences], capstone project adviser's full name, and up to five additional keywords that are not included anywhere else in the abstract. Example of last sentence: Keywords: Liberal Studies, Dr. Polly Smith, sociological, anthropological, social, qualitative, human rights.

SECTION 4: Introduction (required)

The purpose of the introduction is to briefly (about one page) introduce the research problem and focus of the study, establish its significance, and share the researcher's perspectives on the broader context in which the problem occurs. The introduction should

- Provide a framework for the problem within the field (STEM, health, business, or social sciences) and particularly for any specific arena in which the problem is most significant.
- Explain the student writer's personal interest in the problem.
- Include any necessary definitions and should
- End by clearly stating the intended goal(s) of the project.

SECTION 5: Background (required)

The purpose of the background section is to clearly explain the context of the problem. It should include:

- Historical context
- Social/cultural context
- A problem leading to the "need"
- Other relevant background information

SECTION 6: Research question (required)

This section operates much like the proposition of a classical Greek argument. It is one or two sentences that states the purpose of the project in the form of a question. (Example: How might we design a business model that maximizes profits while also maximizing worker satisfaction and productivity?)

SECTION 7: Literature review (required)

The purpose of the literature review is to provide a summary and analysis of what is known about the problem or topic. Its function is to educate the reader about the area that was studied for the capstone project by referencing what other researchers have already published about the topic and problem.

- It is NOT a series of abstracts or annotations but rather a summary and analysis of the relationships and differences among relevant studies and research completed about the topic. The review can be organized in a topical fashion, chronologically, or another appropriate organizational scheme.

SECTION 8: Research design/methodology (required)

The research design/methodology section includes a description of the participants and setting for the data collection, instruments (if applicable), and the overall research design.

- **This section should include the specific steps of how the data was collected for the research project in such a clear fashion that another researcher should be able to replicate the process from the information given.**
- Issues of reliability and validity/trustworthiness should be addressed in this chapter.
- References to appendices most often occur in this section; for example, if interviews were completed as part of the research, the list of questions would be included as an Appendix.

SECTION 9: Results and conclusions (required)

This section synthesizes the data collected from the research project and compares it to the problems identified in sections 5, 6, and 7 to draw conclusions about the effectiveness of the project.

- Typically, some type of descriptive information is provided about the participants, and data (statistics and/or recurring themes or patterns) are presented very factually in a form that is organized appropriately to address each of the research questions and/or hypotheses asked in section 7.
- Tables and figures may be used to summarize the data, if appropriate. All tables and figures should be numbered chronologically and titled descriptively.
- The data collected for the study are presented and discussed in relation to the literature regarding the topic presented in section 6.
- Limitations of the current study and recommendations for future research are also included in this chapter.

SECTION 10: References (required)

This section is an annotated bibliography that references all of the research materials the student writer consulted while conducting the project. This section should use APA style and include detailed annotations.

SECTION 11: Appendices (required)

This section includes all additional materials used or developed during the project. Each item in this section is labeled in order of when it is referenced in the paper. The first item would be labeled Appendix A, the second item Appendix B, and so on. This section might include:

- charts
- figures
- data tables
- interview questions
- maps
- forms

SECTION 12: Vita Auctoris (optional)

The purpose of the Vita Auctoris is to provide a relatively short biographical introduction of the student writer. It may include personal and professional information, but should not be longer than one page single spaced with no indentation for the first word. The Vita Auctoris appears on the next page after the appendices.

Additional general guidelines:

- Margins: use 1.0 inch margins throughout.
- Font: use a standard 11 or 12 point font for the body. Use a larger (14-18) point font for section headings.
- Spacing: double space the body of the paper. Tables of contents and appendices may be single spaced.
- Pagination: pages must be numbered and should appear in a consistent location according to APA style.
- References: at least five references must be cited.
- In-text citations: use parenthetical references according to APA style.

Sources consulted in the preparation of this guide:

Handbook for writing the capstone research project. (2012). *Maryville University*.
The capstone paper: physics 4300. (2014). *The University of Oklahoma*.