GUIDELINES FOR WRITING THE NON-THESIS GRADUATE RESEARCH/PROJECT PAPER

Department of Technology
University of Northern Iowa
Cedar Falls, IA

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Original: STANDARDS AND PROCEDURES FOR THE MASTERS NON-THESIS CANDIDATE’S RESEARCH PAPER
May 1979
Revised: January 2003
Revised: March 2014
Revised: March 2017
TIMELINE OF IMPORTANT DATES

Start planning for your research or project:
   When you have two or more semesters yet to complete your program.

Deadline for your Research/Project Proposal:
   Any time before, but no later than the first week of your intended graduating semester.

Deadlines for your first draft of Research/Project Paper:
   March 1st (If you expect to have the paper completed by the end of any spring semester).
   October 1st (If you expect to have the paper completed by the end of any fall semester).

Deadline for the formal approval of your Research/Project Paper:
   Two weeks prior to your intended graduation date.

GUIDELINES

The Graduate Research/Project Paper is the final culminating document of a non-thesis plan in the Master of Science degree. Because it is believed to be important to a student’s future career responsibilities to have the opportunity to author a technical paper, the research/project paper is a requirement set by the Graduate College, University of Northern Iowa for all non-thesis masters programs.

Master’s degree candidates in the Department of Technology on the non-thesis plan must complete a technical report that manuscripts a particular research investigation or project they performed. This report becomes the student’s Graduate Research/Project Paper for the degree requirement. To be considered complete, the paper must be reviewed and approved by two Department faculty members. One reviewing faculty member should be the student’s advisor, while the second reviewer is recruited by the student. At least one of the two reviewers should have the expertise and/or interest in the topic of study. The research/project paper begins with a proposal submitted to the reviewing faculty members.

Writing the Proposal

You should start planning your research or project when you have two or more semesters yet to complete your program. No more than a week into your intended graduating semester, two copies of a typed proposal of your paper are due to be submitted (two-page minimum not including title page).

Procedures for Submitting Your Proposal

The student submits both copies to his/her advisor, with instruction as to who the student has conscripted as his/her second faculty reviewer. The advisor will then distribute one copy to the second reviewer. The intent of this proposal is to help your advisor and second reviewer assess your readiness to conduct your investigation, and help you prepare for it. When approved by both faculty, the student’s advisor will return one signed copy to the student, and have the other signed copy filed in the student’s folder in the Department of Technology main office.

Your proposal should be double spaced and contain the following:
1. Title Page. With signature approval lines. (See Appendix A).
2. Introduction. Describe the topic and scope of your research or project, and how it relates to your MS-Technology program.
3. **Rationale.** This is your research question(s) or project objective(s). Describe the purpose of your study and why you think it is needed. That is, describe the general outcomes you expect to achieve from your research or project.

4. **Method of Study.** Explain how you intend to perform your study. That is, Will you do a literature review? …A participant observation study? …A set of surveys or interviews? …Will you do an experiment? …Or any combination of these? Roughly explain how you intend to collect your data, what questions you will explore, and what actions you will be taking.

**Writing the Paper**

The final paper should fully reflect the scope of your research or project study, and be written with the following expectations, procedures and evaluation criteria in mind.

**Expectations**

1. Students are expected to express themselves clearly and in a well-organized style of writing that reflects a high level of conceptualization and interpretation.
2. Students are expected to write according to the standards of American English composition and expression. This includes adherence to conventions of grammar, punctuation, capitalization, and spelling.
3. Students are expected to write according to accepted canons of format and style found in the University of Northern Iowa, Graduate College, *Thesis and Dissertation Manual* [https://grad.uni.edu/thesis-dissertation](https://grad.uni.edu/thesis-dissertation) However, some non-thesis papers may require standards that do not apply to the *Manual*. In such cases, alternative format and style used should comply with applicable guidelines found in in the student's specific academic program and disciplines. For example, some programs in the Department of Technology are expected to comply with the *Publications Manual of the American Psychological Association* (latest edition). Check with your advisor and second reader for agreement on what format to use.

**Procedures**

1. Obtain an approved copy of your proposal from your advisor. **You should receive feedback on your proposal within two weeks of its submission.**
2. Conduct your research or project investigation. Upon the approval of your proposal, begin your investigation right away. It takes time to study something in any kind of depth.
3. Write the first draft paper of your investigation (double spaced). Upon completion of your study, write your paper and have copies of your first draft submitted to your advisor and second reviewer in time to meet one of the following deadlines:

   **Deadlines for your first draft:**
   - March 1st (If you expect to have the paper completed by the end of any spring semester).
   - October 1st (If you expect to have the paper completed by the end of any fall semester).

**Evaluation Criteria**

Although there is no specified length to this paper, those that have scored well in the past have been from 20 to 25 pages long (double spaced), excluding the references and appendix pages. **As a minimum for acceptance, you must comply with the above expectations and procedures, along with following well-identified sections and subsections,** for your paper will be evaluated based on the following criteria:

1. **Title Page** (with signature approval lines. See Appendix B).
2. **Introduction.** The introduction is a very important part of any paper. Here you explain what the research or project is all about (citing appropriate sources of information): why your topic is of significance. Explain how your project relates to your specific program of study.
3. **Rationale.** This is your research question(s) or project objective(s). Describe the purpose of your study and why you think it was needed. That is, describe the general outcomes you expected to achieve from your research or project.

4. **Literature Review.** You must review at least ten academically sound journal papers published within the last ten years, and related to your study topic. This section will report the results and findings of other studies related to your research/project (citing appropriate sources of information). Your critique of the literature review will lead to new thoughts, ideas, or methods used in your study.

5. **Method of Study.** Explain how you did the research/project. That is, did you do a literature review? . . . an interview? . . . direct observations? . . . an experiment? . . . or a combination of these? Explain in detail how your data was collected, what questions were explored, what actions were taken, how, etc. Your description of method must be clear enough so that another person may replicate your study if he/she follows the same procedure described here.

6. **Analysis and Results.** This is the most important section of your research/project paper. Be sure to include appropriate subsections. In general, What data did you collect? What did you find out? How did you interpret your findings? How are your findings related to other extant literature? Were there any conflicting findings? What implications can be made?

7. **Summary and Conclusion.** Much like the introduction, the summary is very important and should sum up what your investigation was all about. However, it should not be a word-for-word repeat of your introductory paragraph. Like the introduction, it should present your main point, but with a new twist added. That new twist should come from the evidence you present in the pages between the introductory and concluding statements. Conclude your paper with the answers to the specific research question(s) or project objective(s) with which you started the investigation. State what outcomes you ultimately achieved from your research or project, and what you recommend others do now that they have read your paper.

8. **References.** Always cite appropriate reference to your sources of information when you make statements in your paper that are not common knowledge. Sources of information (at least ten) consist of articles, books, and other resources including the names, titles and phone numbers of people you interviewed or observed. All references should be cited in the text of the paper and listed at the end of the paper alphabetically according to author/editor. All literature citations must use a recognized standard style and format. **NOTE: All Internet sources must have title, author, date, and affiliation of the source** (i.e., a corporation, a government document, a non-profit organization, etc.) as well as the complete and extended Internet address with last access date. In short, make it as easy as possible for your reviewers to retrieve any of your references. If author, editor, or organization is not appropriately cited, that is, if the authenticity of the article is not claimed by any person(s), the article will be considered as an unacceptable source.

9. **Appendix.** Often you may have illustrations or charts and tables that best describe some particular content within your paper. This material would be included here.

**Submitting the Final Paper for Formal Approval**

Upon approval of what is considered by both reviewers to be your final draft, have two new original copies of your paper—complete with two new blank signature Title Pages—printed on 20-22 lb. rag bond (cotton), size 8 1/2 X 11 paper stock. Have both copies spiral bound with black back and clear cover.

**Formal paper approval must be obtained two weeks prior to graduation.** To obtain formal approval, submit the two bound original copies to your advisor, who will then coordinate the signature approvals of both readers and have them filed in the Department main office. A verification form will then be sent to the Graduate College office, verifying your completion of the **Graduate Research/Project Paper.**
(TITLE OF PROPOSAL)

A Graduate Research/Project Proposal
Presented to the Graduate Faculty
of the
Department of Technology
University of Northern Iowa

In Partial Fulfillment of the Requirements
for the
Non-Thesis Master of Science in Technology Degree

by
(Student’s Name)
(Date)

Approved by:

Signature of Advisor

Date

Signature of Second Reviewer

Date
Appendix B
Example Title Page for Final Paper

(TITLE OF PAPER)

A Graduate Research/Project Paper
Presented to the Graduate Faculty
of the
Department of Technology
University of Northern Iowa

In Partial Fulfillment of the Requirements
for the
Non-Thesis Master of Science in Technology Degree

by
(Student’s Name)
(Date)

Approved by:

Signature of Advisor ___________________________ Date ____________

Signature of Second Reviewer ___________________________ Date ____________