Writing the Honors Research Paper

# Steps in Completing Senior Research Paper

## Help with Writing a Research Paper

You should be in frequent contact with your research advisor. Typically, several drafts are needed and you will need to provide your research advisor plenty of time to read your work and provide feedback. You should be open-minded about accepting constructive criticism; remember that the goal is to complete an excellent end product. The [Tahlequah](https://academics.nsuok.edu/languagesliterature/TutoringServices/writingcenterintahlequah.aspx) and [Broken Arrow](https://academics.nsuok.edu/languagesliterature/TutoringServices/WritingCenterinBrokenArrow/default.aspx) Writing Centers are also available for help.

The Library staff can help you locate relevant resources for your research/scholarly activity project. You may need to order some items through Interlibrary Loan, so allow time for these materials to arrive.

## The Project Proposal

The Honors Program requires students to submit a proposal acceptable to their research advisor during the first semester of Honors Research I.

## Research Involving Human Subjects

Federal Law requires that all research involving human subjects, regardless of the source of funding, must be approved in advance by the [Institutional Review Board](https://offices.nsuok.edu/irb/default.aspx) (IRB). In order to comply with the governmental directive, you must complete the appropriate application forms and submit them to the IRB by email to [irb@nsuok.edu](http://irb@nsuok.edu). For details, see the application form. IRB meets regularly, and approval must be received before data collection begins.

A copy of a properly signed and approved “Application for HEAC Study Approval Form” must be filed in the Office of Human Experimental Advisory Committee before the research can go forward. A copy of the approved form must be submitted with the final research paper in the appendix of the manuscript. Failure to follow the Human Subjects Review procedure may result in rejection of your project by the Honors Program.

## Research Involving Animals

Federal law requires that all research projects involving the use of animals be conducted in such a manner as to ensure humane treatment of animals. To ensure humane and proper care, all such projects, regardless of the source of funding, must be approved in advance by the [Institutional Animal Care and Use Committee](https://nsuok.edu/Administration/Committees/InstitutionalAnimalCareUse.aspx) (IACUC). A copy of the approved form must be submitted with the final research paper in the appendix of the manuscript. Failure to follow IACUC procedures may result in rejection of your project by the Honors Program.

## Timeline

Completing the Honors Research Project/Scholarly Activity is a time-consuming process. A Senior Research Project/Scholarly Activity cannot be rushed through at the last minute. Therefore, the following timeline is provided to give students a guide as they plan the progress of the project and the writing of the paper to avoid delaying graduation or losing the privilege of graduating “with Honors.”

### 

| **Task** | **Suggested Completion** | **Responsible Party** | **Notes** |
| --- | --- | --- | --- |
| Select Topic | During Research I | Student and Advisor | Discuss the topic with your advisor. |
| Obtain IRB or Animal Use approval  (if applicable) | 2 months before collecting data | Student and Advisor | Obtain forms from IRB website\*; must be approved before data collection begins. |
| Approval of Proposal by Research Advisor | By the end of Honors Research I | Student and Advisor | Students should submit a prospectus to the research advisor describing research project/scholarly activity. (See Research Syllabus for details.) |
| Conduct research or develop scholarly activity | During Research II and III | Student and Advisor | Students are responsible for contacting the research advisor and getting input for the project during this time. |
| Submit Draft of Research Paper to Research Advisor for approval and revisions | During the beginning of Research IV | Student and Advisor | Paper should be drafted and revised several times before the final manuscript is submitted to the Honors Program. |
| Complete Research Paper | Before October 1 for fall graduations or March 1 for spring graduations | Student | Refer to Guidelines for Writing Senior Research Paper in the Honors Handbook |
| Submit Completed Research Paper to Honors Program to be Bound | Before October 31 for fall graduations or March 31 for spring graduations | Student | See Guidelines for Writing Senior Research Paper in the Honors Handbook for details on research paper layout. |
| Prepare Oral Presentation of Research Project or Scholarly Activity | Research IV | Student | The student must prepare a form of the research suitable for presentation at the end of the semester at the Honors Research Presentation Day. (See Research Syllabus for details.) |
| Honors Research Presentation Day | Semester of Graduation | Student | Presentation to Honors Research Symposium or other approved venue. |

# Format of Paper

## Use of Proper Style Manual

Writing styles differ across the many fields of study available at NSU. Please coordinate with your research advisor to select the writing style most appropriate to your discipline. Typical writing styles include, MLA, APA, and Trabian/Chicago. However, there may be other discipline-specific styles that your advisor would prefer you to adopt. For example, you may be asked to use a writing style for a particular journal.

## Formatting Guidelines

Formatting must be consistent throughout the research paper and follow the guidelines established by the Honors Program and the style manual of your discipline. Students should consult their department’s style manual for proper use of language usage and formatting that has not been otherwise established by the Honors Program. Guidelines for paper content, margins, spacing, font, preliminary page inclusion, page numbering, page order, and HEAC form inclusion supersede those of the discipline style manual.

## Paper

The copy of the research paper for the Honors Program should be written in a standard 8 ½ x 11 inch paper.

## Margins

The margins for the text must be 1 inch at the top, bottom, and right side of the page, and 1 ½ inches on the left side to allow for binding. This applies to all pages within the paper.

## Spacing

The body of the document should be double-spaced. Tables may be single spaced. Consult the style manual of your discipline for spacing after title, headings, quotations, references, etc.

## Type

The typeface must be 12-point Times New Roman. Typeface should be consistent throughout paper body and figure titles. Black ink should be used unless color is approved by the research advisor.

## Page Numbering

Number all preliminary pages with lower case Roman numerals. Place numbers one-half inch from bottom of page, three spaces to the right of center. Count but do not number the title page. Number the paper’s main body with Arabic numbers in the upper right-hand corner of the page ½ inch from the top with a double space before the first line of text, and 1 inch from the right-hand side of the paper edge.

|  |  |
| --- | --- |
| **Page or Section** | **Numbering** |
| Blank Flyleaf Page | No number |
| Title Page | Roman numeral i counted, but not printed |
| Research Paper Signature Page | Roman numeral ii |
| Abstract Page | Roman numeral iii |
| Acknowledgements | Roman numeral iv |
| Table of Contents | Roman numeral v |
| List of Tables (if applicable) | Roman numeral vi (if applicable) |
| List of Figures (if applicable) | Roman numeral vii (if applicable) |
| Main Body – Page 1 | Arabic numbers, counted, but not printed |
| Main Body – Page 2 through last page | Arabic numbers, top right |
| Bibliography/References/Works Cited | Continue from main body, Arabic, top right |
| Appendix or Appendices | Continue from References, Arabic, top right |

## Title Page

On the title page, the following information is vertically and horizontally centered: the title of the research paper (24-point font and bold typeface); the full name of the author (this must be the name of the student record); “Submitted in partial fulfillment of the requirements for the Honors Program for the degree of (Bachelor of Science in Chemistry, Bachelor of Arts in English, etc.)”; “Northeastern State University”; and the month and year in which the degree sought is to be awarded. See the sample title page for further reference.

## Signature/Approval Page

The signature/approval page begins with the research paper keyed two inches down from the top of the page. Use an inverted pyramid for longer titles and center within margins. The name of the Author goes under title. Double-space typed lines. Include signature lines for research advisor and the Honors Director. See the sample signature page for further reference.

## Abstract

The abstract is a one-paragraph, double-spaced, self-contained summary of the most important elements of the paper. The abstract begins on a new page with the same margins as described above. See the sample abstract page for further reference.

## Acknowledgements

The format of the acknowledgements page is determined by the discipline style manual. An acknowledgement page is included immediately before the table of contents. Acknowledgements should be made of any grants that supported the research. The research advisor, readers, and any others who contributed significantly to the project should be noted here. See sample page for further reference.

## Table of Contents (if required by advisor)

The format of the table of contents is determined by the discipline style manual. The table of contents will list the page numbers of the specific pages that follow. Double space each beginning with the list of tables, if applicable, references, and appendices. See sample page for further reference.

## List of Tables and Figures (if applicable)

The format of the list of tables and figures is determined by the discipline style manual. Tables are data presented in tabular form (rows and columns) and should not include any artwork or graphics. Tables should be formatted with clear labels for the rows and columns. Figures are any illustrations that are not in table format. Both tables and figures should be designated to communicate information quickly and clearly. Refer to the style manual for your discipline for documenting tables and figures.

## Body of the Research Paper

The format of the body of the paper is determined by the discipline style manual. The text is to be double spaced with paragraph indentions. Margins are one-inch at top, bottom, and right. A one and a half inch margin on the left side of the paper will allow for binding. All main body pages are to be numbered consecutively with Arabic numerals in the upper right-hand corner of each page, one-half inch from the top and one inch from the right-hand edge of the page. Double-space between the page number and the top line of text. Do not use the abbreviation p. or any other mark before the page number.

## Bibliography/References/Works Cited

The research paper must contain documentation for all sources cited in the text. This documentation takes the form of the Bibliography, References, or Works Cited page, depending on the style manual used. Each source that is mentioned in the text of the research paper must be documented. Formatting will be according to the style manual used.

## Appendices

One or more appendices may be included for material which would detract from the flow of the manuscript, but which is relevant to the research paper. Examples include large data sets, computer programs, and stimulus materials. Formatting will be according to the style manual used by the discipline.

### 

## Order of Pages

The following indicates the correct order of pages. Some pages are required for all research papers while other pages are optional and should be included as needed.

| **Page or Section** | **Required or Optional** |
| --- | --- |
| Title Page | Required |
| Signature Page | Required |
| Abstract Page | Required |
| Acknowledgement Page | Optional/Departmental Designation |
| Table of Contents | Required if applicable |
| List of Tables | Required if applicable |
| List of Figures | Required if applicable |
| Main Body | Required |
| Bibliography/References/Works Cited Page | Required |
| Appendix or Appendices | Optional |

**Effects of Bacillus Toxin Production on**

**Retinal Pigment Epithelium Cell**

**Viability in Vitro**

Jane Doe

Submitted in partial fulfillment of the requirements for the

Honors Program for the degree of

Bachelor of Science

in

Chemistry

Northeastern State University

Month Year

**Effects of Bacillus Toxin Production on Retinal Pigment Epithelium Cell**

**Viability in Vitro**

Jane Doe

This Research Project/Scholarly Activity is approved for

recommendation to the Honors Program

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Honors Research Student

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Research Advisor

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Honors Director

Northeastern State University

Abstract

The abstract is 100 to 150 words (approximately 2/3 of a page). The abstract should define the problem, describe the research method or design, and report the results and conclusions. The abstract may not include tables, figures, plates, subheadings, or references.

Sample Page

Acknowledgements

This research was supported by a William South Research Award. I would like to thank John Doe for his assistance in collecting the data. I would like to thank my research advisor and the Honors Director for their helpful guidance and my friends and family for their support.

Table of Contents

Sample Page

List of Tables………………………………………………………………………………… vi

List of Figures……………………………………………………………………………… vii

Chapter 1: Introduction……………………………………………………………………….. 1

Chapter 2: Review of Literature…………………………………………………………….. 10

Chapter 3: Methodology…………………………………………………………………….. 25

Chapter 4: Results…………………………………………………………………………… 52

Chapter 5: Discussion………………………………………………………………………. 64

References…………………………………………………………………………………… 73

Appendices….......................................................................................................................... 76

A. Sample Schedule……………………………………………………………... 77

B. Summary Tables-Study Sample…………………………………………...…. 82

C. Family Profile Scale……………………………………………………….…. 87

List of Tables

Table 1. Average Error Scores for L-L and L-M SES Dyads for Concrete and

Abstract Stimuli….................................................................................................................. 41

Table 2. Average Number of Critical Attributes Communicated per Dyad………………….. 5

List of Figures

Sample Page

Figure 1. The Marginal Revenue Product Curve for the First Tennessee Bank..................... 38

Figure 2. Pilot Group: Distribution of Categories of Interaction Occurring in First and

Final Banking Sessions……………………………………………………………………… 68

Figure 3. Study Group: Distribution of Categories of Interaction Occurring in First and

Final Banking Sessions……………………………………………………………………… 78

Chapter 1

Sample Page

Introduction

Sample Page

The initial chapter of a research paper is typically used to provide a general introduction and rationale for the research conducted. The research paper should be written with the assumption that the reader has a general knowledge of research methods in the area but no specific knowledge of your specific research topic. Therefore, it is important to clearly explain the nature and scope of your study even though you and your research advisor will already have a good understanding of your research topic.

# Research Paper Checklist

\_\_\_\_1. Have you used one of the approved style manuals as a guide in writing your research paper?

\_\_\_\_2. Have you checked for punctuation, spelling, and grammatical errors?

\_\_\_\_3. Is the print clean, neat, and dark?

\_\_\_\_4. Do all the margins conform to the following standards?

At least:

\_\_\_1 ½ inches from left

\_\_\_1 inch from right

\_\_\_1 inch from top

\_\_\_1 inch from bottom

\_\_\_\_5. Have you received PRIOR permission for the use of colored photographs?

\_\_\_\_6. Is page numbering consistent throughout?

\_\_\_\_7. Did you present a preliminary copy of the research paper to your research advisor to check margins, spacing, font, preliminary page inclusion, page numbering, page order, and HEAC form inclusion?

\_\_\_\_8. Have you used 8 ½ x 11 inch paper?

\_\_\_\_9. Have you secured original signatures of the research advisor and Honors Director on signature pages?

\_\_\_10. Does the date of the research paper title page agree with the month and year that the degree will actually be awarded?

\_\_\_11. Have arrangements for copying the research paper been made well in advance so that the deadline for submitting the research paper to the Honors Program can be met?

\_\_\_12. Have you thoroughly proofread the research paper even after duplication/reproduction?