

Guidelines

for Preparing Thesis in English



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Yonsei University

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◆ Introduction

The master's or doctoral thesis is required for the conferral of a graduate degree at Yonsei University. The manuscript is expected to be an original contribution to the student's field of research and the result of sustained scholarship and research. The thesis will be held in the Yonsei University Library and made available to the public (on the Web as well as in printed forms. This booklet provides directions about the format of the thesis in order to help students write their master's or doctoral Thesis in English at Yonsei University.

Students can choose, in consultation with their thesis supervisor, to write their Thesis in English. Once this decision has been made, students should follow the guidelines in this booklet, which provides the standard format requirements for Thesis in all departments. For field-specific differences in bibliography, citations, etc., style manuals given in the "References" section below. Note that this booklet supplements the Academic Regulations of Graduate School(대학원 학칙 및 내규), and that the overall requirements of Graduate School for all Thesis and graduation requirements must be met. Further detailed information on researching, writing, and formatting of the thesis is available in the Guidelines for Writing Thesis at Graduate School(세 논문작성법).

◆ Requirements

1. Writing Thesis in English

The language of the master's or doctoral thesis at Yonsei University is generally Korean, but Thesis written in English are also encouraged. Students must consult with their thesis supervisor and obtain an advance approval for the thesis written in a language other than Korean, including English. Thesis written in languages other than Korean or English are also permissible upon approval by the thesis supervisor if the foreign language is appropriate for the subject of the thesis.

2. Eligibility for Submission of Thesis

Students must meet certain conditions before they are eligible to submit Thesis. All students must have passed their qualifying examinations and have been under the guidance of a thesis supervisor for at least one semester for a master's student, or for at least two semesters for a

doctoral or combined master's/doctoral student. All students must finish their degree programs within a specified period – four years for a master's student, seven years for a doctoral student, and eight years for a combined master's/doctoral student. However, in cases when a student has been on leave or has other permissible reasons, the Dean of the Graduate School can grant the student up to two more years to complete the degree program.

3. Scope and Breadth of Thesis

The thesis must be an original contribution to the student's field of scholarship. The master's thesis must demonstrate a strong fundamental understanding of the student's field of research, focus on a subject of scholarly relevance, and be clearly written and well organized.

A doctoral dissertation must demonstrate a capacity for original research, present a clear argument that demonstrates how the student's research revises or expands existing boundaries of knowledge or technology. Both the master's and doctoral Thesis should reflect not only mastery or research techniques but also an ability to select and important problem for investigation and to execute it competently. As long as the length of the thesis is concerned there are no restrictions. Master's Thesis are usually under 150 pages with 1.5-or double-spacing, and doctoral dissertations are usually under 300 pages with 1.5-or double-spacing.

4. Thesis Supervisor

All students must select and be approved by a thesis supervisor (principal advisor) in their field of study before embarking on a thesis. The thesis supervisor must be a full-time faculty member at Yonsei University; professors, associate professors, and assistant professors with final degree in their field (usually a Ph.D.) are eligible. In order to ensure that the thesis supervisor will be able to finish supervising the thesis, the thesis supervisor must be a faculty member who has at least four semesters remaining for a master's student or six semesters remaining for a doctoral student before retirement.

◆ Submission of Thesis

1. Copies of Preliminary Manuscript

In order to facilitate preliminary review of the thesis, master's students must submit three (3) copies, and doctoral students five (5) copies of their manuscript to their thesis committee. The final thesis must be submitted to the Yonsei University Library after obtaining an approval from the thesis supervisor and committee members.

2. Thesis Committee

The thesis committee which reviews and approves master's and doctoral Thesis is appointed by the Dean of the Graduate School. Upon the request from the department chair, the Dean of the Graduate School appoints thesis committee members to review the thesis. Committee is composed of three faculty members for a master's thesis and five for a doctoral dissertation, and up to one (master's) or two (doctoral) of Thesis committee members can be from outside of the University. The thesis supervisor automatically becomes a committee member; the Dean of the Graduate School follows the recommendation of the department chair in appointing a Chair of the thesis committee. Any faculty member is eligible to be thesis supervisor (see "The Thesis Supervisor" above) as well as to serve on the thesis committee.

3. Preliminary Review of Thesis

The master's and doctoral thesis must be carefully reviewed by all the members of the thesis committee, and approved by that committee before final submission.

A. Master's Thesis must be carefully reviewed by members of the thesis committee. The degree candidate must give a public presentation of the thesis to the members of the thesis committee and his/her department, and must answer questions posed by thesis committee members and other audiences at the presentation. The thesis committee chair then submits the results of the evaluation of the candidate's performance to the Dean of the Graduate School after consultation with other committee members.

B. Doctoral dissertations must be carefully reviewed by members of the thesis committee. The degree candidate must give a public presentation of the dissertation to the members

of the thesis committee and his/her department, and must answer questions posed by thesis committee members and other audiences at the presentation. The candidate must pass an official preliminary examination for the dissertation within the designated period determined by the Dean of the Graduate School. The thesis committee chair then submits the evaluation of the candidate's performance to the Dean of the Graduate School after consultation with other committee members.

4. Final Manuscript and Review

The final manuscript of the master's and doctoral thesis must be faithfully revised/supplemented, under the direction of the thesis supervisor, according to the recommendations and suggestions made by the thesis committee. The final manuscript must follow the format specified below in "Format of Thesis", and four(4) copies must be submitted to the Graduate School office by the specified deadline. The manuscript will then be subject to final review and approval by the thesis committee and by the Dean of the Graduate School. If needed, the thesis committee can request the candidate to submit materials, sources, and other references used in the thesis. The thesis committee must make the final approval that the thesis is a significant contribution to knowledge and an acceptable piece of scholarly writing. In the process of evaluating the manuscript, the master's thesis must get at least 80 points (out of a maximum of 100) from at least two out of three thesis committee members, and the doctoral dissertation must get at least 80 points (out of a maximum of 100) from at least four out of five thesis committee members. If a candidate fails, a revised and improved thesis can be resubmitted one semester later.

◆ **Format of Thesis**

The format of the final submitted manuscript must conform to the following requirements. Because this final volume will be stored in the University Library and made available to the public, the Graduate School will not accept any thesis not conforming to the following requirements.

1. Physical Requirements

A. Paper. Use white, standard A4 size paper (210 x 297 mm).

B. Typeface and printing. The manuscript must be typed or machine-printed using one of the following fonts: **Times New Roman font.** The entire manuscript must maintain a neat appearance and be free of mistakes. For font size guidelines, use an 18-point size in bold for main chapter headings, 13-point size font in bold for subheadings, and 10- or 11-point size for the main text. Footnotes should be in 9-point size. Maintain either 1.5- or double-spacing throughout the manuscript.(However, 1.15 spacing for MS Word)

C. Margins(for MS Word). Use a minimum of 3.5cm margins on the right and left side. Use 5.3cm margins for the top and bottom. For header, use 1.5cm and for footer, use 3.2cm margins.

D. Alignment and Indentation. Indent the beginning of paragraphs by 2 spaces and utilize justified alignment.

E. Page Numbers. Number each page throughout the manuscript with page numbers centered at the bottom relative to the text (not relative to the paper). Every sheet of paper in the manuscript must be numbered except for the title page (counted but not numbered). Use lower case Roman numerals (i, ii, iii, and so on) for the “preliminary pages” (see below in “Order of the Manuscript”; from the title page through to the last page of abstract). Since the title page is counted but not numbered, the initial page number use “ii”, and it is placed on the signature page. The page following the last page of the abstract is the first page of the “text” (see below in “Order of the Manuscript”) and is numbered “1” and these Arabian numerals (1, 2, 3, and so on) continue to the last page of the manuscript, including any blank pages.

F. Binding and Cover Board. A doctoral dissertation must have a clothbound (hardcover binding); a master’s thesis can have either a clothbound(hardcover binding) or a soft (paper) cover. The cover must be black for a doctoral dissertation. The cover must be in dark blue for a clothbound master’s thesis and light gray for a softbound master’s thesis. The outside cover of the thesis must follow the format in Appendix 1 (Sample Cover Page), and the lettering must be printed in gold letters. For softbound master’s Thesis, the cover lettering must be printed in black.

2. Arrangement and Contents

The contents of the thesis and the internal arrangement of the text and reference sections are determined by the student in consultation with the thesis supervisor. Manuals for the style which governs the format of citations, bibliography, tables, etc., for different fields are provided in the “References” section below.

The order of the preliminary pages must be exactly same as follows. No exceptions are allowed. Sample pages follow in the “Appendices” section below. Sample pages allow differences in master’s and doctoral Thesis. For cases not addressed in the samples below, consult your thesis supervisor and the Guidelines for Writing Thesis at Graduate School.

Order of Manuscript

A. Preliminary Pages

- 1) Title page (counted but not numbered; see Appendix 2)
- 2) Signature page (see Appendix 3)
- 3) Dedication or acknowledgements (usually optional; any copyright permissions obtained must be listed in an “acknowledgements” section)
- 4) Table of contents
- 5) List of Figures, Tables (if applicable)
- 6) Abstract in English (two pages or less)

B. Text

- 1) Text: divided into Preface (if any), Introduction (if any), body of text (usually divided into chapters or sections)
- 2) Appendices (if any)
- 3) References/Bibliography/List of Works Cited
- 4) Abstract in Korean (two pages or less)

◆ References

* Please refer to 연세대학교 <새논문작성법> for more in-depth guidelines on bibliography. Consult your thesis supervisor for advice on which style is the most appropriate for your field or department.

Guidelines for Writing(새논문작성법). 서울: Yonsei University

The Chicago Manual of Style. 14th Ed. Chicago: U of Chicago P, 1993.

Day, Robert A., Ed. *How to Write & Publish a Scientific Paper*. 5th Ed. Oryx P, 1998.

Day, Robert A. *Scientific English: A Guide for Scientists and Other Professionals*. 2nd Ed. Oryx P, 1995.

Gibaldi, Joseph. *MLA Style Manual and Guide to Scholarly Publishing*. 2nd Ed. New York: Modern Language Association of America, 1998.

Rudestam, Kjell E. and Rae R. Newton. *Surviving Your Dissertation: A Comprehensive Guide to Content and Process*. 2nd Ed. Sage Publications, 2001.

Strunk, William. *The Elements of Style*. 4th Ed. Boston: Allyn and Bacon, 1999.

Zerubavel, Eviatar. *The Clockwork Muse: A Practical Guide to Writing Thesis, Dissertations, and Books*. Cambridge: Harvard UP, 1999.

[References example]

Tversky, A., & Kahneman, D. (1971). Belief in the law of small numbers. *Psychological Bulletin*, 76(2), 105–110. **(APA style)**

Doggart, Julia. "Minding the Gap: Realizing Our Ideal Community Writing Assistance Program." *The Community Literacy Journal*, vol. 2, no. 1, 2007, pp. 71-80. **(MLA style)**

G. Liu, K. Y. Lee, and H. F. Jordan, "TDM and TWDM de Bruijn networks and shufflenets for optical communications," *IEEE Trans. Comp.*, vol. 46, no. 9, pp. 695-701, June 1997. **(IEEE style)**

Publication Manual of the American Psychological Association: The Official Guide to APA Style. (2019). United States: American Psychological Association.

◆ Appendices

Below, you will find sample pages for the cover page (outer cover), title page, and signature page, etc., along with information regarding pagination and plagiarism checks. Consult these sample pages as well as the section on “Format of Thesis” above.

Appendix 1. Sample Cover page

Appendix 2. Sample Title page

Appendix 3. Sample Signature page

Appendix 4. Pagination Setting Information for MS Word

Appendix 5. Pagination Setting Information for 한글

Yonsei University Graduate School

Thesis Formatting Guidelines

1 Order of Forms

- 1) Cover page
- 2) Title page
- 3) Signature page
- 4) Table of contents
- 5) Abstract in English
- 6) Reference
- 7) Abstract in Korean

2 Guidelines for completing the form

- 1) **The red text** is a reference which needs removal when printing.
- 2) **The blue text** should be modified to black when printing.
- 3) **The black text** is fixed and should not be modified.
- 4) Do not modify the margins or table size of this form. All modifications should be made according to the instructions.
- 5) Memo is reference so please remove it when printing.

3 Order of Manuscript

- 1) Title page (counted but not numbered; see Appendix 2)
- 2) Signature page (see Appendix 3)
- 3) Dedication or acknowledgements (usually optional; any copyright permissions obtained must be listed in an “acknowledgements” section)
- 4) Table of contents
- 5) List of Figures, Tables (if applicable)
- 6) Abstract in English (two pages or less)
- 7) Text: divided into Preface (if any), Introduction (if any), body of text (usually divided into chapters or sections)
- 8) Appendices (if any)
- 9) References/Bibliography/List of Works Cited
- 10) Abstract in Korean (two pages or less)

Appendix 1 :
Sample Cover page
(delete)

To accommodate the binding size, the total top margin should be 8cm.
(Prohibit changing the table height.)

**Women and the War Effort:
Changes in Workplace Regulations in France,
1941-45 [Thesis Title] (18p)**

Gildong Hong [Author Name] (18p)

**The Graduate School
Yonsei University
Department of [○○○] (18p)**

Appendix 2 :
Sample Title page
(delete)

**Women and the War Effort:
Changes in Workplace Regulations in France,
1941-45 [Thesis Title](18p)**

A [Dissertation/Master's Thesis]
Submitted to the Department of [○○○]
and the Graduate School of Yonsei University
in partial fulfillment of the
requirements for the degree of
[Doctor of Philosophy in ○○○/Master's of ○○○](13p)

Gildong Hong [Author Name](13p)

(December/ June) 2023 [Month/Year of Submission](13p)

Appendix 3 :
Sample Signature page
(delete)

This certifies that the [Dissertation /Master's Thesis]
of [Chunhyang Sung] is approved.(13p)

[signature]

Thesis Supervisor [Gil-Dong Hong]

[signature]

Typed name : Thesis Committee Member [Na Ra Lee]

[signature]

Typed name : Thesis Committee Member [Na Ra Kim]

[signature]

Typed name: Thesis Committee Member [Dae Han Kim]

[signature]

Typed name: Thesis Committee Member [Dae Han Lee]

Three signatures total in case of master's

The Graduate School
Yonsei University
(December/June) 2023 [Month/Year](13p)

TABLE OF CONTENTS(16p)

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LIST OF TABLES(13p)

<Table 1> Typical spectral transmission curves...	5
---------------------------------------------------	-------	---

ABSTRACT(13p)

**SynThesis of Highly Substituted Cyclopentane and
Cyclohexane from an Unsaturated Sugar(13p)**

Diels-Alder reactions of ... (10p)

Key words : (within 10 words)(10p)

1. Introduction(16p)

1.1. Research background(13p)

The ...¹ (10p)

¹... (9p)

References example (13p)

Tversky, A., & Kahneman, D. (1971). Belief in the law of small numbers. *Psychological Bulletin*, 76(2), 105-110. **(APA style)**

Doggart, Julia. "Minding the Gap: Realizing Our Ideal Community Writing Assistance Program." *The Community Literacy Journal*, vol. 2, no. 1, 2007, pp. 71-80. **(MLA style)**

G. Liu, K. Y. Lee, and H. F. Jordan, "TDM and TWDM de Bruijn networks and shufflenets for optical communications," *IEEE Trans. Comp.*, vol. 46, no. 9, pp. 695-701, June 1997. **(IEEE style)**

Publication Manual of the American Psychological Association: The Official Guide to APA Style. (2019). United States: American Psychological Association

Abstract in Korean (13p)

계층적 표현에 의한 의료영상의 3 차원 구성 및 처리(13p)

본 논문은 (10p, 들여쓰기 2 칸)

(박스 삭제 요망)

● 국문 요약이란?

국문 요약은 논문의 전체적 흐름과 논지를 간단히 밝혀 적는 것으로, 읽는 이들에게 부분적인 사소한 문구나 표현에 빠지지 않고 논문 전반의 방향을 이해하도록 도와주는 구실을 한다. 따라서 국문 요약은 결론 부분의 단순한 사전 누설이 아니라, 전반적인 흐름에서 벗어나지 않도록 읽는 사람에게 길잡이의 구실을 해야 한다. 마치 사소한 바람이나 파도 때문에 잘못된 뱃길에 접어들지 않게 하는 나침반의 노릇을 한다고 생각하면 좋다.

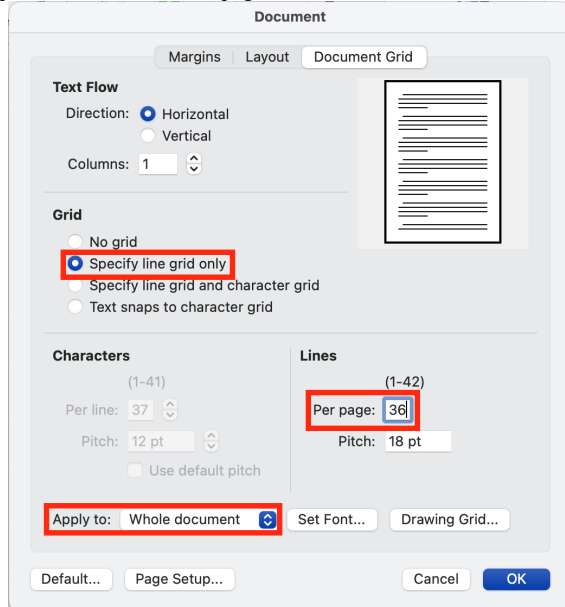
출처: <새 논문 작성법> 36-37 쪽

핵심되는 말 : 계층적 표현 (10 단어 이내) (10p)

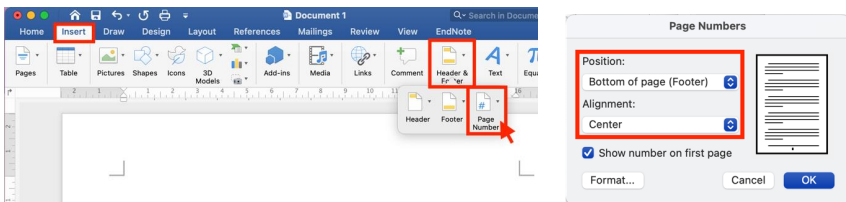
Pagination How-to (using MS Word)

1. Basic page settings

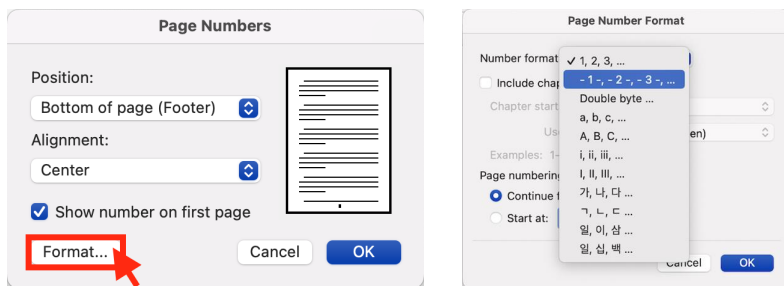
1) First, click **Format** → **Document** → **Document Grid** from the menu. Then click OK.
(Note that this process is to write basic page numbers for the whole document.)



2) Click **Insert** → **Header & Footer** → **Page Number** and apply the following instructions:
Position: Bottom of Page (Footer)
Alignment: Center

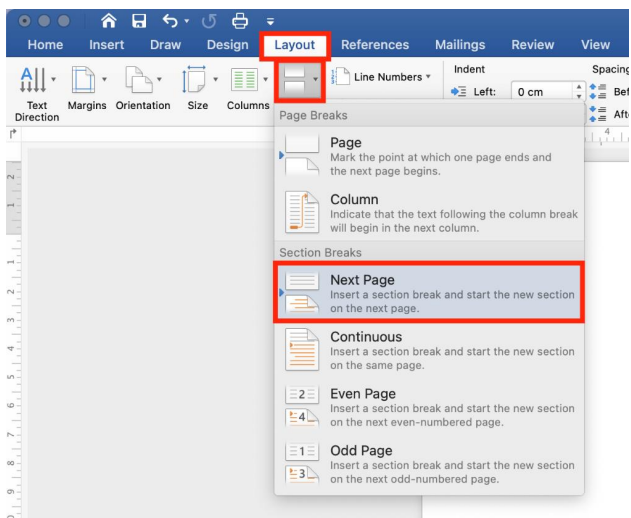


3) Click on **Format** from the Page Numbers window. Select the page number format of your choice in the Page Number Format window.

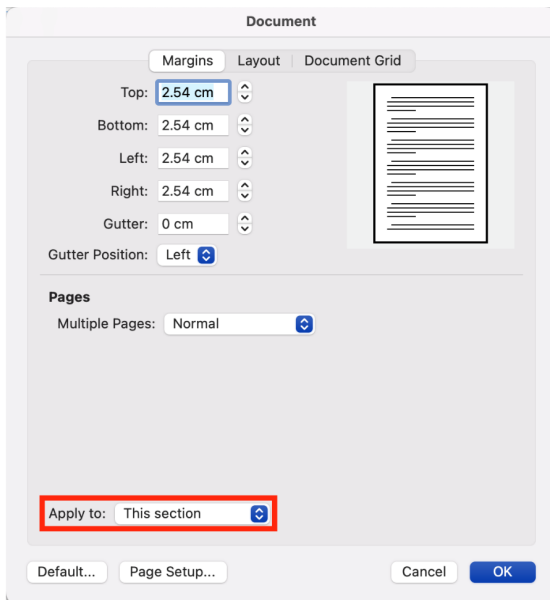


2. If you wish to have more than one page layout or page number setting in one document

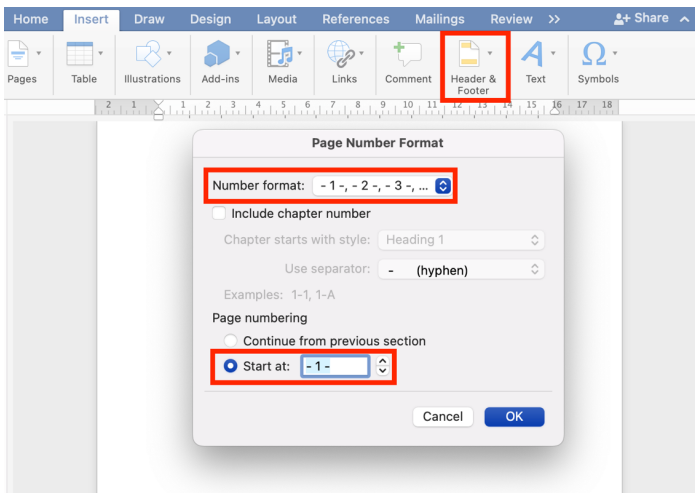
1) To set a different page numbering system for certain pages, try a section break. By clicking **Layout** → **Breaks** → **Section Breaks** → **Next Page**, you will be able to start a new section on the next blank page.



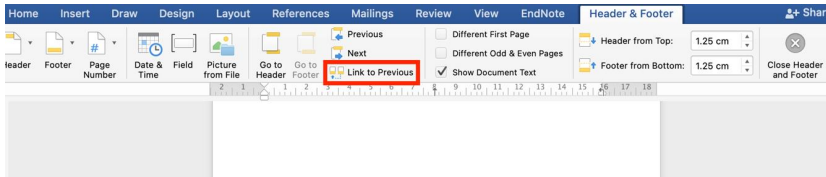
2) Click **Format** → **Document** and select ‘**This section**’ from the Apply to option. Press OK. (This allows the page section to function independently, enabling it to have its own separate page property.)



Apply the page number format and page numbering of your choice from the Header & Footer menu.



3) In the first header of each new section, double click on the footer and uncheck ‘**Link to Previous**’. Doing this ensure that even if you delete the page number field of the previous section, it will not affect the current section.

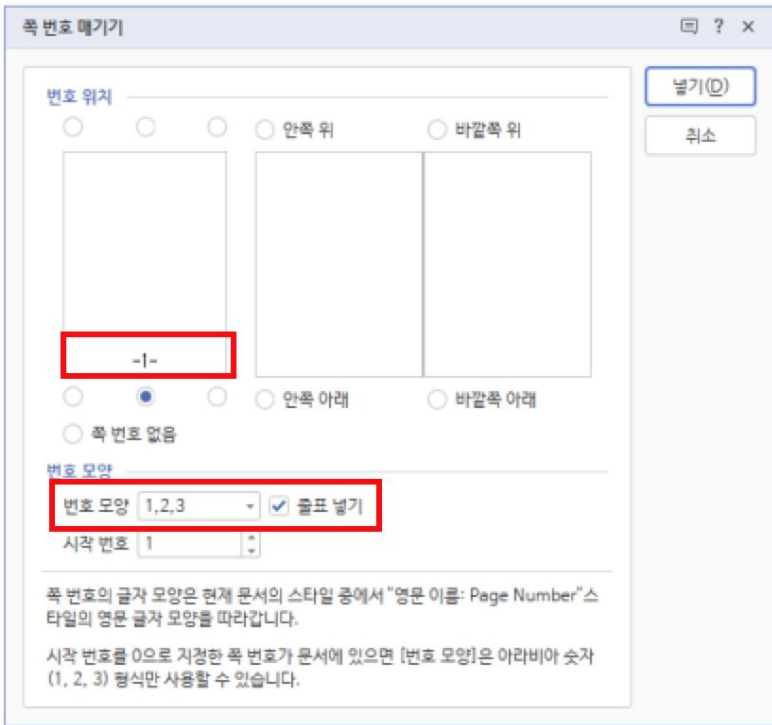


4) If you always want to start with a new page and a new format, you can repeat the steps described in step **number 2**.

Pagination How-to (using 한글 ver.2020)

1. Page settings

- a. Select [쪽] from the menu and click [쪽 번호 매기기].
- b. Once your screen looks like Figure 1-1, you can choose the location of your page number, decide whether it should be a number or a Roman numeral, and determine whether it should have a dash before and after the number.



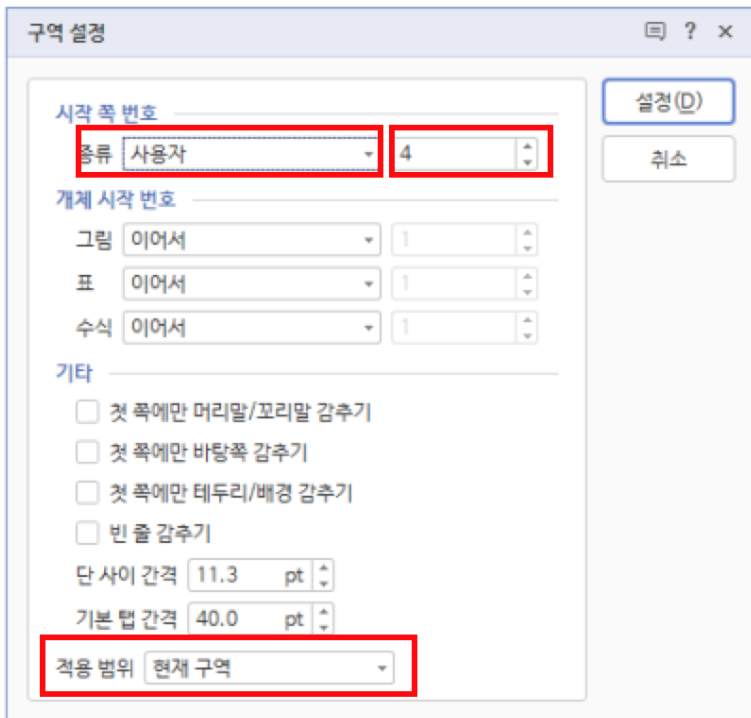
<Figure 1-1>

- c. For example, if you want to set your page number in the center as an Arabic numeral with a dash around it, refer to Figure 1-1.

2. If you wish to have more than one page layout or page number setting in one document

(For example, use Arabic numerals for pages 1, 2, 3, 4, and switch to Roman numerals for subsequent pages).

- First, place the cursor **one page before the desired page** where you want to change the page number. Make sure the cursor is positioned at the **very bottom of the page before the desired page**.
- Select [쪽] from the menu and click [구역설정].
- You'll find your screen similar to Figure 1-2. ->
Your screen should look like figure 1-2



<Figure 1-2>

- Refer to Figure 1-2 and apply the settings inside the red box.
 - 시작 쪽 번호 – 종류 : 사용자
 - 시작 쪽 번호 – 값 : 4 (This number stands for the number that you wish to start on your page.-> (This number represent the starting page number you want for your document.

- stands for the number that you wish to start on your page.->
-
- For example, if you wish to start your page number as '4' on the third page of your document, you may select the number '4' in this option.)
- 적용 범위 : 현재 구역
- If you apply this setting, you may notice the appearance of a blank page. In such a case, you can remove the blank page by pressing the backspace key from that page.
- If you apply this setting, you may notice of a blank page. In that case, you can remove the blank page by pressing the backspace key on that page.
-

e. Click [쪽] – [쪽 번호 매기기].



<Figure 1-3>

f. Select the page number type of your choice as shown inside the red box.

Research Ethics FAQ(Graduate School)

2023.12. Research Ethics Center at Office of Research Affairs

1. What is research misconduct?

- ▶ According to the university's [Research Ethics Regulations], research misconduct can be defined as follows.

Article 9 (Scope and Verification of Research Misconduct)

① 'Research misconduct' refers to fabrication, falsification, plagiarism, invalid authorship, unjust duplication publication, interruption of research misconduct investigation, etc., carried out in the proposal, execution, reporting, and presentation of research, as defined in the following subparagraphs. It also includes instances where individuals propose, coerce, or pressure others to engage in the aforementioned acts of misconduct. However, this excludes cases caused by minor negligence or differences in the interpretation or judgment of data and research results.

1. 'Fabrication' refers to the act of producing, recording, or reporting primary research materials, research materials, or research results that do not exist.
2. 'Falsification' refers to the act of distorting research content or results by artificially manipulating research materials, equipment, processes, etc., or arbitrarily modifying or deleting primary research materials or research materials.
3. 'Plagiarism' refers to the act in which a third party utilizes other people's original ideas, which are not generally available knowledge, or creations without properly crediting the source and passes them off as their own work. However, the determination of plagiarism is primarily based on the opinions of experts in the relevant academic field, such as scholarly societies.
 - a. Using all or part of someone else's research content without proper citation.
 - b. Modifying some of the words or sentence structures from another person's work while not providing proper attribution.
 - c. Incorporating someone else's original thoughts or ideas without appropriate citation.
 - d. Using another person's work through translation without citing the source.
 - e. Presenting all or part of the core concepts from research content published or presented by someone else as if they were one's own research concepts, without proper citation. This includes cases where research primary data or materials such as graphs, charts, diagrams, or images are different.
 - f. Cases in which the cited material becomes the main content of a new work, even if the source of the original work is acknowledged
 - g. Unfairly using unpublished creative works or ideas of others without proper citation.
4. 'Invalid authorship' refers to the act of not conferring author status, without justifiable reasons, to someone who has made an academic contribution to the research content or results, or conferring

author status to someone who has not contributed academically on grounds of appreciation, courtesy, etc. In these cases, while it generally constitutes improper authorship attribution if it violates the following points, specific judgments may align with the practices and norms within the respective academic field.

- a. Those who significantly contribute to planning the research, data collection, analysis, critical revisions of key content, or substantially contribute to the composition of the research content or results can be considered as authors.
 - b. Individuals responsible solely for securing research funds, data collection, or research management cannot be considered authors, but their assistance in direct or indirect support of the research can be acknowledged in acknowledgments.
 - c. The order of authorship attribution should be determined based on the authors' relative contributions to the research, with consensus among the participating authors.
 - d. The author's affiliation should be indicated based on their affiliation at the time of conducting the research, such as during experimentation and data analysis.
 - e. The corresponding author is responsible for the entire process of writing, submission, revisions, and publication of the paper, and they should inform and receive approval from co-authors.
 - f. A supervising professor should not publish or present a graduate student's thesis in academic journals or elsewhere solely under the professor's name.
5. 'Unjust duplication publication' refers to the act in which a researcher obtains unfair benefits, such as research funds or recognition for separate research achievement, after publishing a work that is identical or substantially similar to previous research without citing the source. When determining whether improper duplicate publication has occurred, the following factors should be considered:
- a. The assessment of duplicate publication typically focuses on papers published in academic journals. However, whether to include theses, research reports, conference papers, and similar works in this assessment depends on the standards and practices within the specific academic field.
 - b. Compiling research results from previously published papers into a book does not constitute duplicate publication. However, appropriate citation should be provided in such cases.
 - c. Publishing content from an academic journal in a popular book or general interest magazine does not constitute duplicate publication.
 - d. Republishing a longer paper (full paper) that includes additional research results, interpretations, or detailed research procedures after publishing a shorter form paper (letter, communication) does not qualify as duplicate publication. However, proper citation is essential in this scenario as well.
 - e. When the same research results are published in a different language, proper citation of the original paper and obtaining prior approval from the respective journal does not constitute duplicate publication.
6. 'Interruption of research misconduct investigation' refers to the act of intentionally interfering in an investigation of misconduct or inflicting harm on the complainants.
7. It includes behavior beyond commonly tolerable scope of each research field

2. What should we know to prevent research misconduct?

- ▶ To prevent research misconduct, researchers must ensure throughout the entire research process that (1)

Deliberate research misconduct such as fabrication, falsification, plagiarism, etc., is strictly prohibited, and (2) Unintentional errors stemming from the researcher's incompetence, negligence, or self-deception do not interfere. Hence, researchers should ensure they conduct their research diligently, honestly, and pay sufficient attention to detail to uphold accuracy.

(1) Guidelines for Preventing Fabrication and Falsification

- (1) Researchers must present research findings honestly without forgery/fabrication, falsification, or inappropriate data manipulation. Altering research images (e.g., microscope images, radiographs, gel electrophoresis images) in a misleading manner is strictly prohibited.
- (2) Researchers should strive to describe methods clearly and distinctly and report results following guidelines. Publications should provide sufficient detail for other researchers to replicate experiments successfully.
- (3) Research reports must be complete. Omitting findings or results that do not support the author's or sponsor's hypotheses or interpretations due to discomfort, inconsistency, or an inability to explain is unacceptable.
- (4) Funders and sponsors of research should not have the authority to reject the publication of unfavorable outcomes related to their products or status. Researchers should not draft agreements allowing sponsors to refuse or control the release of results (excluding exceptional cases such as research classified as confidential by the government due to security concerns).
- (5) Authors should promptly notify the editor if they discover errors in a submitted, accepted, or published paper. If necessary, authors should collaborate with the editor to issue a correction article or retract the paper.

<Source: First Steps in Research Ethics for New Researchers. Korea Research Foundation. 2019>

(2) Proper Citation as Method for preventing Plagiarism

Here are several methods for proper citation for accurate referencing.

1. When using a portion of someone else's work verbatim (copying), paraphrasing, summarizing, or utilizing someone else's ideas, credit must be given for the contributions made by others.
2. When using specific sections of someone else's work verbatim, those sections must be marked with quotation marks (" ").
3. When paraphrasing sections of someone else's work, ensure a complete understanding of the content and rephrase it in your own words while acknowledging the source.
4. Any opinions, criticisms, historical facts not originally considered by the researcher should be properly cited whether quoted directly or paraphrased.
5. When uncertain about whether a fact or idea constitutes common knowledge, it's essential to cite the source.
6. Information or data obtained from online sources must be cited just like material or information from one's or others' papers or publications.
7. Factual information acquired through research, such as statistical data, requires proper citation. For instance, when answering a question like "How many people die from heart disease in Korea each year?" relying on someone else's research findings, it's essential to cite the source for that information.

<Source: Understanding and Practicing Research Ethics. Korea Research Foundation. 2011>

(3) Prevention of Self-plagiarism and Improper duplicate publication

▶ Self-Plagiarism and Improper duplicate publication

※ Caution regarding the utilization of a researcher's previous work in subsequent publications:

- Even if a researcher modifies some content or adds new material from their previous work, if there is no qualitative difference in the argumentation and conclusions between the two works, they are essentially similar publications.
- There exist various types of ethical issues in academic writing, including self-plagiarism, duplicate or redundant publication, salami/segmented publication, and imalas publication.
- Despite being one's own work, copyright often belongs to the journal or publisher. Hence, when utilizing parts or the entirety of one's previous research, proper citation is necessary, and permission from the original journal's editor for the initial publication should be obtained.

▶ Typical Types of Improper duplicate publication

- Salami Publication:

Dividing a single research paper into two or more smaller papers for publication, for instance, extracting portions from a thesis to publish multiple smaller papers. (However, this may vary across academic disciplines.)

- Imalas Publication:

Presenting, as if it were an entirely new paper, by adding some research outcomes or clinical cases to an already published paper. (However, it is acceptable if there is substantial new academic value even when reusing some of the previous research outcomes.)

<Source: First Steps in Research Ethics for Junior Researchers. Korea Research Foundation. 2019>

(4) Efforts to Prevent Improper Authorship Attribution

An author refers to someone who has made a substantial intellectual contribution to the research, takes responsibility for the integrity of the research, and has reached an agreement among the research team regarding being listed as an author (consent among researchers regarding authorship is crucial)

Authors can be classified into three types:

the first author (primary author), co-author, and corresponding author.

① **First Author (Primary Author):** Refers to an individual who has played a significant role in generating data by collecting it, conducting experiments, interpreting the results, and drafting the manuscript. However, in cases of collaborative research, there can be multiple first authors.

② **Co-Author:** Refers to an individual who has significantly contributed to the research project

alongside the first author, participating in data collection, analysis, interpretation, conclusion drawing, and report writing.

③ **Corresponding Author:** As an author submitting a manuscript to a scholarly journal for publication, it's essential that the corresponding authors is able to communicate easily with the publisher or readers before, during, and after the publication process.

The following improper authorship attributions clearly constitute violations of research ethics, so caution should be exercised during thesis writing.

① **Granting authorship despite no intellectual contribution or involvement in the research content or outcomes**

- **Coercion Authorship:** When a senior researcher within a research lab or department uses their position to pressure junior researchers to include their name in a paper.
- **Honorary Authorship:** Including the name of a well-known figure who did not contribute to the research (done either to gain favor with the individual or to enhance the credibility of the paper).
- **Mutual Support Authorship:** Adding the name of a well-known individual who hasn't contributed to the research (done either to flatter the individual or enhance the credibility of the paper).

② **Failure to attribute authorship despite intellectual contributions or contributions to the research content or outcomes.**

- **Ghost authorship:** When someone who significantly contributed to the research is excluded from the paper's authorship (also considered plagiarism as they might have used another person's research results without proper citation).

<Source: First Steps in Research Ethics for New Researchers. Korea Research Foundation. 2019>

3. Frequently Asked Questions (FAQ)

(1) When the source is cited in the main text, is it necessary to cite the source again when it is mentioned in the Korean abstract, introduction, conclusion, etc.?

Abstracts summarize the nature of a research paper in the author's own words and generally do not require source citations for references. This is because when summarizing significant ideas or expressions from others cited in the main text, their sources can be traced back to the main body of the paper. However, when restating content quoted from the main text in the introduction or conclusion, it is necessary to provide the sources.

<Source: Integrated Guide to Research Ethics for Practitioners. 2021>

(2) How should the results of a 'plagiarism detection program' be utilized? If the plagiarism check result percentage meets the criteria set by the academic society of 'plagiarism probability 10% or less', is it safe to submit the manuscript?

The sentence similarity percentage (%) from plagiarism detection software alone cannot determine whether it's plagiarism. The numeric result simply indicates the similarity between sentences in Work A and Work B, implying similarity but not directly equating to plagiarism. However, it's reasonable to speculate that higher sentence similarity percentages suggest a greater likelihood of plagiarism.

Depending on the nature of the academic field or the research topic—for instance, in disciplines requiring extensive citation of classical texts or in papers focusing on reviewing existing research—the sentence similarity score may naturally be high. However, it's crucial not to hastily conclude plagiarism in such cases. Instead, a meticulous examination should determine whether the similar content represents someone else's original and crucial ideas or unique research content rather than common knowledge. Conversely, even a single similar sentence might constitute plagiarism if it includes essential content or original ideas from another work. Therefore, it's advisable for experts in the respective academic fields to accurately determine cases of plagiarism.

Sentence similarity checks serve as auxiliary tools to quickly identify the likelihood of potential plagiarism and for preventive measures. However, they cannot precisely detect cases such as plagiarism in a single sentence. Relying solely on the numerical results of these checks for assurance is not advisable. Therefore, even if the sentence similarity check meets the criteria set by the academic community, it's essential to thoroughly review the parts highlighted as 'suspected plagiarism' in the assessment results. Strengthening citations and references by cross-referencing the original text is advisable. To truly avoid plagiarism, it's crucial to express one's thoughts in one's own words above all else.

<Source: Integrated Guidebook on Research Ethics for Practitioners, 2021>

- (3) I am currently in a doctoral program in the field of science and engineering, and I intend to publish some of my research work in a journal before including it in my doctoral thesis. Would publishing research content in a journal first and then using that content in my thesis be considered self-plagiarism or duplicate publication? Conversely, would presenting a paper in a journal based on the research results of my thesis after obtaining the degree be considered duplicate publication?**

An article published in a recognized academic journal has undergone peer review and is officially published. Therefore, utilizing significant data or research content from this publication in a doctoral thesis is not considered duplicate publication as long as proper attribution is provided. How previously published papers are cited in a doctoral thesis should comply with the regulations outlined in the university's guidelines for thesis submission.

In the opposite scenario, whether the content in a doctoral thesis can be published in an academic journal depends on whether the academic field considers a doctoral thesis an official publication or the publishing policy regarding submissions based on theses in that particular journal. Therefore, it is crucial to review any regulations or established practices governing this matter and proceed

accordingly.

In engineering and natural sciences, utilizing research outcomes from a doctoral thesis for publication in domestic or international academic journals is generally viewed as acceptable without constituting duplicate publication. However, in humanities and social sciences, there are academic journals where using thesis content for journal articles is prohibited. Even in cases where it's allowed, these journals may require acknowledgment that the article is based on a doctoral thesis. Therefore, authors need to verify the publication ethics standards of the relevant journals when publishing articles based on their theses.

In engineering and other technical fields, there are opinions that you don't need to cite your thesis in a research paper since it's considered an unpublished work, like an unpublished doctoral dissertation or master's thesis. However, considering today's internet access where theses are converted into PDFs and readily available, it's advisable to provide the source whenever possible, when using information from a thesis in scholarly articles.

<Source: Integrated Research Ethics Guidebook for Practitioner., 2021>

(4) Can parts of a jointly published research paper be reused in a thesis?

Reusing certain research content included in a thesis that was previously presented in a scholarly journal is a common practice in the field of science and engineering, not only in Korea but also in many other countries. However, when crafting the thesis based on content already published in a journal, it's crucial to acknowledge that the same content was published in the journal by providing citations.

There's a critical aspect that requires particular attention in this context. For instance, if a student, as one of the authors in a jointly published academic paper involving multiple researchers, directly incorporates the entire content of that paper into their thesis, it could raise issues of plagiarism and copyright infringement. Including any part of data or text produced by others in their thesis without explicit consent is a violation of copyright. Even with prior consent, using someone else's content without proper acknowledgment constitutes plagiarism and research misconduct. If there's a necessity to refer to others' data, it must be cited within the text. Discussing and obtaining consent from the advisor or supervisor beforehand when constructing a thesis based on previously published research outcomes is crucial in preventing such issues.

<Issues and Answers in Research Ethics, 2016>

(5) Is it possible to present the results obtained from project participation in both a thesis and a scholarly journal article?

In engineering and related fields, research often involves professors securing research funds and conducting studies jointly with graduate students. The graduate students, under the guidance of their professors, conduct research and subsequently write their theses based on this research. Consequently, after completing a research project, a final research report and the student's thesis may emerge, where research methods or data might overlap.

If the student's thesis is submitted first, it's possible to use the research methods, data, interpretation, conclusions, etc., from this thesis to compose a research report. In the realm of engineering research, utilizing a graduate student's thesis as the basis for a research report submission isn't generally considered an ethical concern due to the nature of research practices. However, when presenting the research outcomes from such projects in the form of a thesis or academic paper, it's important to appropriately comply with guidelines specified in research project agreements, considering the guidelines or conditions outlined by the supporting institution regarding the presentation and use of research outcomes. Sometimes, approval from the supporting institution may be necessary or citations might be required when utilizing research results.

In general, research funding is expected to support new findings on topics that have not yet been explored. It's acceptable to utilize the results from a new research topic funded by a grant for both a thesis and as a report for the funding source. However, if the thesis has already presented certain research findings, and later, similar findings from a related grant-funded project are to be published in an academic journal, this might raise ethical concerns. It could be considered as not planning for a new topic from the point of applying for the research grant, as the content was already disclosed. This could be seen as deceiving the research funding institution, which anticipates results from a new research topic, as well as the readers who trust in the credibility of the research.

<Source: Q&A on Research Ethics, 2016>

(6) What is the scope of review for the Institutional Review Board (IRB)?

The application of the <Bioethics and Safety Act> applies to research that (1) qualifies as research and (2) involves subjects of human (or human-derived materials).

Simple surveys (exit polls, opinion surveys), investigations related to business activities (market research, product satisfaction surveys), and other surveys based on generalized knowledge not systematized as research do not fall under research and are therefore not subject to IRB review.

In the case of project research, it is generally mandatory to undergo IRB review during the research process.

However, for dissertations at the master's or doctoral level, the decision to undergo review is at the researcher's discretion. Nevertheless, in the case of research involving human subjects, researchers should be cautious as it could pose an issue if they submit and publish academic papers in domestic and international journals based on their thesis after its completion.

(7) Can research data collected through surveys be separated and published as individual papers?

The primary consideration should be why one would seek to divide the data collected for four variables through a single survey into separate publications rather than presenting it in an integrated form. It's important to reflect on whether the original intention wasn't to collect data for multiple variables under the guise of the inconvenience or difficulty of data collection and then publish individual papers by analyzing each variable. This is crucial because if presenting the data separately (often referred to as 'salami slicing') results in a lack of comprehensiveness and coherence compared to presenting it together, it becomes challenging to justify the data separation.

If sufficient justification is possible within the first consideration, given that each paper utilizes different variables, it can be deemed acceptable to publish them separately. However, since the subjects, methods, and duration of the surveys are likely the same, and this data has already been utilized in the doctoral dissertation and will be used similarly in subsequent academic papers, it's crucial to clearly indicate the sources for previously used data or related content. Furthermore, describing the connections, differences, and the significance of other variables from the same sample across the doctoral dissertation and later journal articles can aid readers in understanding the differences between the two papers despite their overlapping aspects.

<Source: Research Ethics Q&A, 2016>