



# CALIFORNIA POLYTECHNIC STATE UNIVERSITY SAN LUIS OBISPO, CA

# **GRADUATE EDUCATION**

Master's Thesis Formatting Guidelines

AY 2022-2023

GRADUATE EDUCATION OFFICE

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The Graduate Education Office has developed this manual to aid the student and advisory committee in presenting the work in a format that is acceptable as a scholarly publication. In this booklet of guidelines, you will find our general university format requirements as well as departmental thesis requirements. As a consensus document, both sets of requirements must be factored into the formatting. The goal is to provide enough flexibility to meet the needs of each of the graduate programs at Cal Poly while maintaining a consistency for all theses developed at our institution.



# PREPARING TO WRITE A THESIS

A primary component of many graduate programs is the writing of a thesis that clearly communicates the objectives and results of your research efforts to other scholars. It is important to organize your thoughts before you begin to write. Develop a detailed outline and review it with your thesis advisor and committee members. Remember you are telling a story about your process of discovery. Consult with your advisor and determine a particular writing style that you want to adopt: MLA, Chicago, APA, LaTex, etc. As a general formatting reference guide, students may use Form & Style: Research Papers, Reports, Theses, by Carol Slade and Robert Perrin. Adherence to a set of guidelines is a necessary prerequisite to the typical review process that leads to publication or public display of your intellectual products. It is an important learning experience that will help prepare graduate students to be effective communicators in their professional careers.

# SUBMITTING A THESIS

Cal Poly utilizes an electronic thesis deposit process (Digital Commons) that is hosted through the Kennedy Library. The DigitalCommons@ CalPoly promotes discovery, research, cross-disciplinary collaboration, and instruction by collecting, preserving, and providing access to scholarly work created at Cal Poly. The repository also provides access to relevant documents created by administrative offices, departments, and programs at Cal Poly. For information on the Master's Thesis Submission Process, please refer to the website: grad.calpoly.edu/mastersthesis/masters-thesis.html.

# CHECKLIST SUMMARY OF REQUIRED FORMATTING

#### **GENERAL**

- Margins are 1.5" left, 1" top, right, bottom throughout.
- Font style is consistent throughout document Arial, Calibri, Courier, Helvetica, Times, or Times New Roman.
- Font size is 10 12 pt. throughout, including titles and headings.
- Text is double-spaced throughout (approved exceptions outlined on p. 6).
- Page numbers are located either bottom center, bottom right, or top right.

#### PRELIMINARY PAGES

- Includes, in the following order: Title, Copyright, Committee, Abstract, Acknowledgments (optional), Table of Contents, List of Tables (if appropriate), List of Figures (if appropriate).
- Contains consistent capitalization and spacing of headings.
- Pages are numbered using lower-case Roman numerals Title Page is NOT numbered, Copyright Page begins on p. ii.

#### TITLE PAGE

- Should match Sample Title Page in the Appendices of this manual.
- Title Page is counted, but NOT numbered.
- Includes full thesis title written in ALL CAPS.

#### **COPYRIGHT PAGE**

- Copyright Page has current year and full student name.
- Should match Sample Copyright Page in the Appendices of this manual.

#### COMMITTEE MEMBERSHIP PAGE

- Should match Sample Committee Membership Page in the Appendices of this manual.
- Thesis title matches name of title exactly, without ALL CAPS (use Title Case).

#### **ABSTRACT**

- Should match Sample Abstract Page in the Appendices of this manual.
- Thesis title on Abstract Page matches name of thesis title on Title and Committee Membership Pages, without ALL CAPS (use Title Case).

#### **TABLE OF CONTENTS**

- Begins with List of Tables, followed by List of Figures.
- No titles run into numbering column or page number column.
- All page numbers listed are accurate.

#### LIST OF TABLES

- Each table label exactly matches table caption and page number found in text.
- No labels run into numbering column or page number column.
- Table labels appear above tables in the body of the thesis.

#### LIST OF FIGURES

- Each figure label exactly matches figure caption and page number found in text.
- No labels run into numbering column or page number column.
- Figure labels appear below figure images in the body of the thesis.

#### CHAPTERS (TEXT)

- Introduction (Chapter 1) begins on page 1.
- Pages are numbered consecutively using Arabic numerals.
- Each chapter begins on a new page.
- Each chapter and sub-chapter are consistently formatted (check headings for consistency).
- No widows or orphans throughout text.
- Each table has a consecutively numbered caption; full caption is on same page as table.
- Each figure has a consecutively numbered caption; full caption is on same page as figure.
- References cited in the text are listed in the Bibliography, References, or Works Cited.

# BIBLIOGRAPHY, REFERENCES, OR WORKS CITED

- References are listed either alphabetically or numerically according to approved style manual.
- Links to sources are not underlined (remove hyperlinks).

# CAL POLY GENERAL FORMATTING REQUIREMENTS

All theses must be written in the English language. The Portable Document Format (PDF), Word (DOC), or Rich Text File (RTF) formats are recommended for the body of the text since they retain all formatting and graphics and may allow for links and annotations. Students are responsible for ensuring that their files are compliant with campus and CSU ADA policies (American Disabilities Act).

#### FONT STYLE AND FONT SIZE

All text, page numbers, table numbers, figure numbers, captions, and references should be in the same font. If you capitalize or bold a chapter title or sub-title, follow that format throughout your document. One of the following fonts should be used consistently throughout your thesis:

Arial Calibri

Courier Helvetica

· Times New Roman **Times** 

For consistency, 10 to 12 point font is to be used throughout your document, including all titles. Be consistent in your utilization of capitalization and bold type, e.g. if you capitalize or bold a chapter title or sub-title, follow that format throughout your document. Only black font is to be used throughout your document.

For symbols, one of the following should be used:

- Symbol
- **Zapf Dingbats**

Italicized, underlined, and bold font should be used sparingly within paragraphs. Use discretion when italicizing or underlining words to create emphasis; overemphasizing words can be distracting to the reader.

For titles and subtitles, please make sure the use of italicized, underlined, or bold font is used consistently throughout your document.

#### **MARGINS**

Each page must have at least a 1.5" left-hand margin, and at least 1" top, bottom, and right-hand margins. Most word-processing packages provide templates that will set these automatically for your document. Margins may be wider, but not narrower than these standards. Please note that all pages must meet these requirements, including the preliminary pages, text, figures and tables, and bibliography.

#### LINE SPACING

Each page must be double-spaced, with the following exceptions:

- Preliminary pages (Title, Copyright, Committee Membership, Abstract, Acknowledgments, Table of Contents, List of Tables, List of Figures) may be single-spaced.
- Tables within the text may be single-spaced.
- Extended citations (long quotations) within the text may be set off and single-spaced, depending on the specific style guide you are using (MLA, APA, etc.).
- Definitions within glossaries or questions within surveys may be single-spaced, but double-spaced between entries. Scholarly references—footnotes, endnotes, bibliography or list of references—may be single-spaced, but double-spaced between entries.

#### PAGE NUMBERS

Page numbers must be placed either at the bottom center, bottom right, or top right of each page, beginning with Arabic numeral 1 on the first page of Chapter 1 or the Introduction. If the top right is chosen, the page number may be placed at the bottom center when beginning a new chapter. On landscape-oriented pages containing graphs, figures, photos, or illustrations, it is acceptable to suppress page numbering.

#### PRELIMINARY PAGE NUMBERING

Preliminary pages should be numbered using lower-case Roman numerals. The title page (p. i) is counted but not numbered.

For help in numbering pages differently in different sections (Word 2010), please visit: http://bit.ly/1xA0K27.

#### WIDOWS AND ORPHANS

A "widow" is a short line or single word ending a paragraph at the top of the next page. An "orphan" is a heading or subheading that appears at the bottom of a page with the text beginning on the following page. These are not desirable in a formal document. Word processing software can be set to avoid both "widows" and "orphans" automatically.

#### **CHAPTERS**

Each chapter should begin on a new page.

#### **JUSTIFICATION**

Type may be left-justified, which leaves a "ragged" right margin, or may be fully-justified, which establishes even margins on the left and right. The thesis committee should be consulted as to the standards in your discipline.

#### PARTS OF THE THESIS

A thesis report should include three main categories of materials in this order:

- Preliminaries (front matter)
- Text (chapters)
- Reference materials

The preliminaries should be arranged in the following sequence with pagination in lower-case Roman numerals at the bottom of each page. Samples of the preliminary pages are included in the Appendices section of this manual.

#### **PRELIMINARIES**

•	Title Page	required (page i, b	ut not numbered)

Copyright Page required (page ii) **Committee Page** required (page iii) **Abstract** required (page iv)

Acknowledgments Page optional (cont. Roman numeral pagination) **Table of Contents** required (cont. Roman numeral pagination) List of Tables if applicable (cont. Roman numeral pagination) List of Figures if applicable (cont. Roman numeral pagination)

### **TEXT (CHAPTERS)**

The chapters (text) follow with Arabic numeral page numbering.

required (numbered, beginning with page 1) Text

#### REFERENCE MATERIALS

required (numbered) Bibliography, References, or Works Cited

Appendix(es) if applicable (numbered)

#### **PRELIMINARIES**

Sample preliminary pages appear in the Appendices section of this manual. Preliminary pages should look consistent and cohesive. Page headings should appear in all capital letters and be of the same size font. They should be centered at the top of the page, two inches from the top of the page. Preliminary pages should not include bold-face, italic, or underlined font.

#### TITLE PAGE

The Title Page should look exactly like the Sample Title Page in the Appendices of this manual. The title should be worded exactly the same way on the Title, Committee Membership, and Abstract Pages, but should appear in all capital letters on the Title Page.

#### COPYRIGHT PAGE

A Copyright Page is required in your Master's thesis. Master's theses are automatically under copyright protection as soon as they appear in a tangible form. They do not have to be registered through the U.S. Copyright Office to be copyright protected; however, for those who want to register the copyright, the procedure and forms are on the U.S. Copyright Office website: copyright.gov.

#### **COMMITTEE MEMBERSHIP PAGE**

This page lists the thesis title, author, date submitted, and committee members' full names and titles. This page should be formatted to exactly match the sample page found in the Appendices of this manual.

#### **ABSTRACT**

The Abstract is a concise and descriptive summary of the work completed. It should explain the work rather than defend or evaluate it. It should begin with the most important information, which will usually be the conclusions or findings, followed by a brief but precise statement of the problem; a description of the research method and design, if applicable; and the significance of your conclusions.

#### **ACKNOWLEDGMENTS**

This is an optional page. If used, it expresses appreciation for guidance and assistance. Although not required, the recognition of the generosity of time and knowledge of the people who helped is a courtesy. It should be simple and sincere.

#### TABLE OF CONTENTS

The Table of Contents must provide the page location of the List of Tables (if included), List of Figures (if included), each chapter or section and sub-sections, as well as Bibliography/References, and Appendix(es) (if included). No other preliminary page listings other than the List of Tables and List of Figures should be included on this page (\*for exceptions, please see note below). Use of leader dots and spacing in the Table of Contents are optional and at the discretion of the writer and their committee.

#### LIST OF TABLES

A table is a columnar arrangement of written material or data, organized to save space and convey relationships at a glance. All table labels listed in the List of Tables must be written exactly as they appear within the text. Table labels should appear above tables in the body of the thesis. Tables must be listed in the List of Tables with the exact corresponding page number. Include a List of Tables even if there is only one table in the document.

#### LIST OF FIGURES

Charts, graphs, maps, and illustrations of other kinds should be grouped and labeled as figures. All figure labels listed in the List of Figures must be written exactly as they appear within the text. Figure labels should appear below figure images in the body of the thesis. Figures must be listed in the List of Figures with the exact corresponding page number. Include a List of Figures even if there is only one figure in the document.

\*Note: If your thesis includes a list of nomenclature and symbols, include the list as an appendix or after the List of Figures. If included after the List of Figures, include an entry for your List of Nomenclature or List of Symbols in the Table of Contents after the List of Figures and before Chapter 1 of the text.

#### **BODY OF TEXT**

The text, or body, of a thesis begins on page 1, which directly follows the preliminaries. In the body of the thesis, page numbers must appear as Arabic numerals. Page number placement must be consistent throughout the document. The specific work presented will determine the nature and the organization of the thesis report. The Thesis Committee will have suggestions concerning its design and layout.

#### BIBLIOGRAPHY, REFERENCES, OR WORKS CITED

References should contain only those works cited within the text. A Bibliography is any list of references at the end of a text, whether cited or not. It includes works used, additional background reading, and any other material deemed appropriate for background reading.

If a source is cited within the text, it must be listed in the References or Bibliography sections.

Students may follow APA, MLA, and Chicago styles for referencing and bibliographical entries. If the student's department requires an alternative style, it may be used for referencing and bibliographical entries, but formatting should follow the guidelines outlined above and should be consistent. Only one Bibliography, References, or Works Cited section may appear in the thesis.

#### **APPENDICES**

An appendix should include materials that supplement the main text. Original data, summary tabulations, complicated mathematical proofs, descriptions of equipment, very lengthy quotations, supporting legal decisions or laws, supplementary illustrative materials, computer printouts, questionnaires, and other such documents belong in an appendix.

If a document contains two or more appendices, each appendix should be assigned a letter, given a title, and listed by letter and title in the Table of Contents.

#### SUPPLEMENTARY FILES

Supplementary files are intended to enhance the full text of the submission and should be considered essential supporting material. The student's faculty committee is responsible for deciding whether this material is essential to the thesis. Each supplementary file should be listed as a separate appendix.

#### **IMAGES AND MULTIMEDIA FILE FORMATS**

Students interested in including a multimedia object as a supplementary file to their theses are encouraged to read the DigitalCommons@ CalPoly FAQs section at digitalcommons.calpoly.edu/faq.html#faq-35 and to work with their advisor, in addition to the DigitalCommons@ CalPoly library administrators, with regard to this possibility.

#### TROUBLESHOOTING COMMON PROBLEMS

The thesis should be proofread carefully prior to submission to the Graduate Education Office. It is suggested that a spell checker be used and that the document be reviewed by others for flow and formatting. The following are the most common errors found in theses:

- Missing or incorrectly formatted preliminary pages
- Pagination erratic or incorrectly located on pages
- Tables or Figures missing captions; captions in the wrong place in text; captions not agreeing with the List of Tables or List of Figures
- References cited in the text but missing in the Bibliography
- Misspelled words
- **Grammatical errors**
- Font size that is too large (larger than 10 to 12 point font)

#### **COPYRIGHT**

Cal Poly students are responsible for submitting their own Master's theses. The student must grant the University permission to reproduce and distribute the work electronically.

#### **USE OF ORIGINAL WORK NOT AUTHORED BY THE STUDENT**

Students may need to secure copyright permissions from the original copyright owner if the thesis contains 3rd party content (such as images, articles, music, or other accompanying material). Consult the library copyright web page for additional guidance on this topic: lib.calpoly.edu/ research/copyright.

#### CAL POLY INTELLECTUAL PROPERTY POLICY

The Cal Poly Intellectual Property Policy (2.A.4.a.) states: "Students will normally own the copyright to the scholarly and creative publications they develop, including works fulfilling course requirements (term papers and projects), Senior Projects, and Master's Theses/Projects. Students retain copyright ownership as long as they are not paid for the work that results in the creation and do not receive extraordinary University resources in support of the work." The full policy can be accessed online at www.research.calpoly.edu/policyIP.

#### COPYRIGHT PROTECTION OF STUDENT WORK

Original work is automatically protected under copyright as soon as it is recorded in a tangible form. Theses do not have to be registered through the U.S. Copyright Office for the work to be protected by copyright; however, you will not be able to pursue a copyright infringement lawsuit in the U.S. unless your work has been registered with the U.S. Copyright Office. If students wish to register their work, the procedure and forms are available on the U.S. Copyright Office web site. It is good practice to include a copyright notice where it will be seen by readers, so that they will be reminded that the work is protected by copyright and will be deterred from infringing upon your intellectual property. If your work were to be infringed upon, a copyright notice proves that the act was willful, which is an important component of proving infringement.

If you wish to further clarify the rights of reuse of your intellectual property, you may consider utilizing a CreativeCommons license, which is a free legal tool that provides authors with a simple, standardized way to give the public permission to share and use your creative works—on conditions of your choice. Learn more about CreativeCommons at: creativecommons.org.

# **ELECTRONIC DISTRIBUTION OF THESES**

#### STUDENT INFORMATION

Students making submissions to the DigitalCommons@CalPoly agree to share their work and waive privacy rights granted by FERPA for the work for the purpose of making the work available in the DigitalCommons@CalPoly.

Students will have an opportunity to provide a personal email address upon submission of their reports. The personal email is not displayed or otherwise shared. The email is utilized by the system technology to provide updates on the status of the submission to the student. Once the paper is publicly accessible, the system will auto-generate a monthly statistical report to the student.

#### WEB DISTRIBUTION

An electronic thesis is governed by the campus, department, and library policy in effect at the time of its final submission to the Library.

#### LEVELS OF DISTRIBUTION

Two levels of electronic distribution of theses are available. A student, in concert with their advisor, may choose the level which fits the situation.

### OPEN ACCESS (WORLDWIDE DISTRIBUTION)

The first option, recommended by the University and Library, is to make the information freely available worldwide. It should be noted that this Open Access option may be viewed by some book or journal publishers as publishing the work. They may see a conflict with this level of distribution of the thesis.

Please note: Kennedy Library's Interlibrary Services Department (ILS) receives national and international borrow requests for Cal Poly theses. Open Access designated projects will be distributed to satisfy relevant borrow requests. Restricted Access reports will not be distributed through ILS until the restricted access time period lapses and the item is available via Open Access.

### RESTRICTED ACCESS (COMPLETE RESTRICTION TO FILE ACCESS)

The second option is to embargo (restrict) the thesis for patent, proprietary, or data sensitivity reasons. The student, with the written approval of their advisor, may select "restricted access" distribution for the report. During the submission process, the student will have the ability to indicate the initial embargo time period.

Reports holding the status of "Restricted Access" will receive a bibliographic record in the Library Catalog and a brief bibliographic display will be available in the DigitalCommons@CalPoly. "Restricted Access" status is designed to secure the work, even disallowing access to the Cal Poly community. This procedure addresses situations such as when a patent application is planned or when proprietary or security interests are at stake. A report under the "Restricted Access" status will be placed on a secured server, but the file will not be made visible or available. Only the descriptive data (author, title, abstract, and basic information about the submission) will be publicly visible.

The status of "Restricted Access" will lapse after 1 year or 3 years, depending on the restriction initially determined by the student and his/ her advisor. The student may contact the Graduate Education Office to obtain an extension before the expiration of the initial restriction. After the restriction expires, the document will be moved into Open Access (worldwide) distribution unless an exception has been granted by the department and/or college/school.

#### OTHER RESOURCES

- · Copyright Registration: www.copyright.gov
- · DigitalCommons@CalPoly Upload Instructions: grad.calpoly.edu/files/thesisuploadinstructions.pdf
- Form & Style: Research Papers, Reports, Theses, by Carol Slade and Robert Perrin (13th edition, 2008)
- The Chicago Manual of Style, 15th ed., University of Chicago Press, 1993
- Publication Manual of the American Psychological Association, 5th ed., Washington, DC, 2001
- MLA Handbook for Writers of Research Papers (J. Gibaldi & W. Achtert), 5th ed., New York, Modern Language Association of America, 1995
- Human Subjects Protocol: research.calpoly.edu/HS-homepage
- Master's Thesis Approval Form: grad.calpoly.edu/masters-thesis/masters-thesis.html
- Step-by-step tutorials and additional information on ensuring ADA compliance for textual, visual, and auditory files are available from: Professional Development for Accessible Technology in the CSU: accessibility.calpoly.edu/content/web/index

#### Appendix A: Sample Title Page

# TITLE OF THESIS IN ALL CAPS, INVERTED PYRAMID STYLE IF MORE THAN ONE LINE

A Thesis presented to the Faculty of California Polytechnic State University, San Luis Obispo

> In Partial Fulfillment of the Requirements for the Degree Master of in

> > by Student's Full Name Month Year

# Appendix B: Sample Copyright Page

© 2023 Writer's Full Name ALL RIGHTS RESERVED

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#### Appendix C: Sample Committee Membership Page

#### **COMMITTEE MEMBERSHIP**

TITLE: Be sure title matches Title Page exactly, without ALL CAPS (use Title Case)

**AUTHOR:** Student's full name

DATE SUBMITTED: Month and year

COMMITTEE CHAIR: John Doe, Ph.D.

Professor of Electrical Engineering

COMMITTEE MEMBER: Jane Doe, Ph.D.

Associate Professor of Electrical Engineering

Type member's Full Name, Title, Department or **COMMITTEE MEMBER:** 

Company per sample above

#### Appendix D: Sample Abstract Page

#### ABSTRACT

Thesis Title (Must match Title Page exactly, without ALL CAPS (use Title Case)) Student's Full Name

	The Abstra	ct may be either	single-	or double-sp	paced, ar	nd may l	oe longer t	han one	page, if
necess	ary, with co	nmittee approva	ıl. Also,	"keywords"	may be	added a	nt the end o	of the ab	stract.

Keywords: Select descriptive keywords and separate terms with a comma and a space.

# Appendix E: Sample Acknowledgments Page

#### ACKNOWLEDGMENTS

This page is not required, but if you have received funding for your research or assistance or guidance that you feel should be noted, it belongs on this page.

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