

CLU MS Clinical Psychology Thesis Handbook

Jamie Bedics, PhD, ABPP

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Chapter 1

Goal of the Handbook

The goal of this handbook is to provide students with the information needed to successfully complete the master's thesis in the MS in Clinical Psychology Program (MSCP) at California Lutheran University (CLU). The manual should be understood as a supplement to the broader policies and procedures defined by the program and university.

Updates can be found at: <https://jdbedics.github.io/thesishandbook/>

1.1 Scholarly Research

Scholarly research requires the skills of inquiry which must be demonstrated by all students. As a participant in research activities at CLU, the University expects you to develop the abilities to:

1. Create or contribute empirical knowledge to the existing body of information in a discipline;
2. Carryout systematic inquiry;
3. Use tools of research including analyzing existing research, implementing research designs, using and/or developing instrumentation, employing appropriate methods of data analysis, and handling the logistics of conducting a research study;

4. Work with faculty or other professionals on a research project;
5. Use scholarly writing techniques.

Research may be a thesis or a research project. While both are important contributions to the body of knowledge in a discipline, they have different purposes as described in the following sections.

1.2 Comprehensive Exam

By default, students entering the MSCP program are required to complete the comprehensive exam. Students can, however, choose to *opt out* of the comprehensive exam and instead complete a thesis.

What is the comprehensive exam?

- A closed book essay test that covers all the material studied during the program.
- The test is offered at the end of the spring semester during the second year.
- The exam consists of a morning session (9AM-Noon) and an afternoon session (1PM-4PM).
- During each session, students choose to respond to 3 of 5 questions.

How the comprehensive exam *replaces* the thesis

- Students register for the exam by paying a *comprehensive exam fee* during the semester they take the exam (typically spring of their 2nd year).
 - Students **do not** take *PSYC 566 Thesis (3 units)* in the spring of their 2nd year.
 - As a result, students who take the comprehensive exams graduate with a total of **37-units** instead of 40-units with the thesis option.
 - Students who take the comprehensive exam are also **not** required to take *PSYC 565 Research Practicum* in the fall of their 2nd year. Students can choose an elective of their choosing which could be PSYC 565 if they choose.
-

1.3 Thesis

The thesis is the result of an original empirical investigation that creates new knowledge within a discipline. It solves a problem related to lack of knowledge and is generally composed of the following elements:

1. Identification of a problem caused by lack of knowledge;
2. Background and literature review of existing information about the problem;
3. Methods to be used for obtaining the needed knowledge;
4. Resulting new knowledge;
5. Interpretation of the new knowledge;
6. Transparent and open sharing of materials and results via pre-registration and the open science framework.

Tasks:

- Students complete all the requirements outlined in this manual.
 - Students enroll in *PSYC 565 Research Practicum (3 units)* during the fall of their 2nd year.
 - Students enroll in *PSYC 566 Thesis (3 units)* during the spring of their 2nd year.
 - Students who fail to complete the thesis by the end of the 2nd year can:
 1. take *PSYC 599-01 Thesis Continuation* and pay all associated fees every semester until the thesis is completed or,
 2. take the comprehensive exam and pay the comprehensive exam fee.
-

1.4 Pros and Cons: Thesis Vs. Comps

Thesis “Pros”

- Students gain a high degree of expertise and mastery in the area under study.
- The thesis timeline creates accountability and structure in completing the thesis.
- Doctoral programs often look favorably towards a completed thesis that demonstrates students’ ability to successfully complete a research project.
- Doctoral programs that require a thesis might *wave* the thesis requirement based upon the completed thesis at CLU.
- Students can have the thesis bound into a book (see Thesis Binding).

- Students can earn quality letters for recommendation from their thesis committee members. These letters are often more meaningful than letters from employers or course instructors.

Thesis “Cons”

- Despite the structure offered through coursework, the thesis requires a considerable amount of extra work and self-discipline. The amount of autonomy and work can be quite stressful.
 - Students take an extra 3-units (PSYC 566) in the spring of their 2nd year for a total of 40-units versus 37-units for the comprehensive exam option.
-

Comps “Pros”

- Students are given a review sheet to help them study.
- The exam is completed in a single day compared to the thesis that takes 2-years.
- Questions that are not adequately answered can be successfully remitted before “failing.”
- Students can still complete an **research project** (see next section) which would allow the first three *thesis pros* to be achieved.
- Students can choose any 3-credit elective during their second year (spring is recommended).
- The entire program is 37-units versus 40-units with the thesis option.

Comps “Cons”

- A 6-hour, closed book, essay test can be stressful and exhausting.
 - Research experience is valued by PHD programs and many, but not all, PSYD programs.
 - The research project, if chosen, could not be as structured as the thesis option.
-

1.5 Research Project Option

Research Project + Comprehensive Exam

Students can complete their own independent research project, identical to the thesis, but without the coursework (PSYC 566) and obligation to follow the requirements in this manual. There are two scenarios where a student might choose to take the comprehensive exam and work on a research project :

1. A student can decide, from the beginning of the program, that they want to avoid the pressure and extra work of the thesis requirements but use the program to work on a research project. They could take PSYC 565 in the fall of their second year but will not take PSYC 566 during the spring.
2. Students might attempt the thesis but, for a variety of reasons, fall behind and not be able to complete all the necessary requirements of the thesis in order to graduate. If this occurs, then the student can always move to the comprehensive exam (in order to graduate) while continuing to work on their thesis as an independent research project (for no credit).

In both of these scenarios, students are required to take the comprehensive exam and pay the comprehensive exam fee in order to graduate and in accordance with university policies which can be found through the university registrar.

Chapter 2

Thesis Committee

Finding a Committee

For many faculty, being on a thesis committee is a lot of work and they are often reluctant to join a committee. Consequently, how students choose to approach faculty is very critical. Dr. Bedics will walk students through much of the process.

1. Identifying Potential Faculty

Search the CLU website for potential faculty that could contribute to your idea. Look at faculty interests in graduate psychology, undergraduate psychology, as well as other departments at CLU. Students could also identify faculty at other universities that might serve on the committee. Once identified, students should email Dr. Bedics to discuss *prior to students contacting the faculty themselves*.

2. Foot-in-the-Door

Students first introduce themselves to faculty through email. **Do not ask them to join your committee** in the first email. Instead, ask them if they have time to answer questions about your project. If they don't have time or incentive to do this simple task then they will not be willing to be on your committee. The foot-in-the-door strategy allows students to gain feedback from the person even if they are not willing to be on students' committee.

Here is a properly formatted and professional email using the foot-in-the-door strategy:

Dear Dr. ###,

My name is STUDENT and I am currently developing my master's thesis project at California

Thank you for your time and consideration.

Sincerely,

First Name Last Name

If they reply, and are positive, then you it is your responsibility to be flexible with *your* time. Also, please never ask for an appointment in the same week.

3. Requesting Committee Membership – If the initial meeting goes well then Dr. Bedics will email the faculty member to discuss the role of the chair and reader.

4. Working with your committee

The committee will be most successful when students establish clear expectations for meeting with their committee members. Clearly established expectations will prevent you from emailing *too little* or *too much*. It is best to suggest *fewer* meetings, perhaps one at the beginning and one at the end of the semester. You will have more meetings with your chair than your reader. Establish the following:

- Make a clear statement that you are respectful of their time and do not want to meet too much or too little. Faculty often appreciate such direct and respectful statements.
 - Suggest two meetings a semester and go from there. They might suggest more or a timeline based on other criteria.
-

Chapter 3

Thesis Checklist - Overview

Students who wish to pursue the thesis option are required to meet with Dr. Bedics at the end of every semester in order to review their progress according to the following timeline. Students who miss any of the following steps are removed from the thesis option and will be required to complete the comprehensive exam in order to graduate.

	Task	Date Due	Year	Finished
1.	Thesis Topic Approved	October 1st	First Year	<input type="checkbox"/>
2.	Setup OSF	October 1st	First Year	<input type="checkbox"/>
3.	Literature Review Draft Psych 564	December 15th	First Year	<input type="checkbox"/>
4.	Academic Good Standing	December 15th	First Year	<input type="checkbox"/>
5.	Method Section Draft	May 1st	First Year	<input type="checkbox"/>
6.	Literature Review Revision	May 1st	First Year	<input type="checkbox"/>
7.	Academic Good Standing	May 15th	First Year	<input type="checkbox"/>
8.	Committee Assignment	June 30th	Summer	<input type="checkbox"/> Chair <input type="checkbox"/> Reader
9.	Academic Good Standing	July 3rd	Summer	<input type="checkbox"/>
10.	Enroll in PSYC 565	August 1st	Second Year	<input type="checkbox"/>
11.	Committee Approval of Proposal	September 1st	Second Year	<input type="checkbox"/>
12.	IRB Submitted	November 1st	Second Year	<input type="checkbox"/>
13.	Academic Good Standing	December 15th	Second Year	<input type="checkbox"/>
14.	Enroll in PSYC 566	December 15th	Second Year	<input type="checkbox"/>
15.	Complete Draft to Dr. Bedics	May 1st	Second Year	<input type="checkbox"/>
16.	Committee Approval of Final	May 10th	Second Year	<input type="checkbox"/> Chair <input type="checkbox"/> Reader
17.	OSF Approval	May 1st	Second Year	<input type="checkbox"/>
18.	Thesis Commons	May 15th	Second Year	<input type="checkbox"/>
19.	Thesis Binding	Optional	Second Year	<input type="checkbox"/>
20.	GitHub Blog	Optional	Second Year	<input type="checkbox"/>
21.	Shiny App	Optional	Second Year	<input type="checkbox"/>

3.1 Thesis Topic

Defining the Problem Area

The general thesis topic is required to be selected during the beginning of the first semester of the first year. The thesis topic, does not, however, determine the hypotheses, methodology or general approach taken by the student to understand the problem (e.g. experimental, quasi-experimental, meta-analytic methods). It would be premature for any student to attempt to define a hypothesis in the first year when their understanding of the topic area is limited and not justified by a thorough literature review. Hypotheses are typically developed after the first year of study.

Due: October 1st, first year.

3.2 Open Science Framework

Creating a transparent and reproducible workflow



Open Science Framework

OSF is a repository that allows researchers to transparently share their work with the larger scientific community. During the course of the program, students use OSF to organize their thesis and other independent research projects. Instructions for setting up an OSF project can be found [here](#) and will be reviewed with Dr. Bedics at students' first advising meeting.

In addition to organizing students' workflow, OSF allows students to showcase their work to their peers and potential employers and doctoral advisors.

Students in the thesis option are required to use OSF and it is strongly recommended for students completing the research project.

Due: October 1st, first year.

3.3 Literature Review Timeline

Understanding the Problem

The development of the literature review begins during the fall of the first year during PSYC 564 Advanced Research Methods. The literature review will become the “introduction” section of the final thesis paper. The literature review demonstrates the student’s mastery of the literature surrounding the *problem* to be addressed by the thesis. Initial drafts, such as that from PSYC 564, are 10-12 pages in length.

The development of the literature review is, however, ongoing throughout the two years of the program until the final draft is submitted on May 1st of the second year. The typical length of a *complete* literature review is between **20-40 pages** long but there is no maximum length.

Due:

1. December 15th, first year (First Major Draft);
2. May 15th, end of first year (Second Major Draft with Hypotheses);
3. May 1st, end of second year (Final Draft).

3.4 Method Section Timeline

Solving the Problem

The method sections defines the procedures of the thesis. The method section consists of the participant selection, selection of methods of measurements or materials, the procedure and the data analytic method. The method section can be worked on in *PSYC 552 Psychometrics* during spring of the first year

and also *PSYC 562 Statistics II: Regression*. The method section is finalized during *PSYC 565 Research Practicum* in the fall of the second year.

Due:

1. May 1st, first year (First Draft);
2. December 15th, second year (Second Draft)

3.5 Committee Assignment

Committee members are faculty or experts in the field that support the students work on the thesis. Students work with the program director to find the most appropriate committee members to support their research project. The committee is composed of a Chair and a Reader. Their roles are described below as is the process for finding and selecting committee members.

Committee Chair

The chair must have *content knowledge* of the area under investigation for the thesis. For example, if the thesis is on schizophrenia then the chair must have extensive knowledge of schizophrenia. The chair is either a part-time or full-time faculty member at CLU and is chosen with the approval of the Program Director, Dr. Bedics. There can be exceptions to the above criteria with the approval of Dr. Bedics.

Committee Reader

The reader must have either content knowledge or expert *methodological knowledge* of the area under investigation for the thesis. For example, if the thesis is on schizophrenia and utilizes an experimental design the reader can either have knowledge of schizophrenia **or** knowledge of the experimental methods proposed. The reader can be a part-time or full-time faculty member at CLU or a professional in the community with at least a Master's degree that has the aforementioned expertise. The reader must be chosen with approval of program advisor and thesis Committee Chair. There can be exceptions to the above criteria with the approval of Dr. Bedics.

Please see the **Thesis Committee** section of this handbook for information on how to acquire a committee.

Due: June 30th, Summer after First Year

3.6 Committee Approval of Proposal

During the summer following the first year, committee members read the literature review and method section and provide a general statement of approval to Dr. Bedics. Based upon this approval, students are allowed to progress to the *thesis track*. The rest of the thesis process is guided through coursework including PSYC 565 Research Practicum in the fall of the second year and PSYC 566 Thesis in the spring of the second year.

Due: September 1st, Second Year

3.7 Academic Good Standing

Academic good standing refers to maintaining a GPA above a 3.0 throughout the entire program and acting consistently with all policies and procedures defined by the program (see Program Handbook) and university (see university policy and procedures). Any student who receives below a B- in any course is not allowed to complete the thesis for course credit and partial fulfillment of the degree. They can, however, complete a research project with the support of full-time faculty.

Due: Every semester

Chapter 4

Coursework Relevant to the Thesis

The knowledge gained from every course taken at CLU can be used to improve the development of the thesis. For example, if you have an interest in examining a specific disorder for your thesis then it makes sense that you study that disorder in *PSYC 510 Psychopathology*. In *PSYC 560 Statistics I: Exploratory Data Analysis*, you might consider finding open data that allows you to better understand your problem area through data visualization.

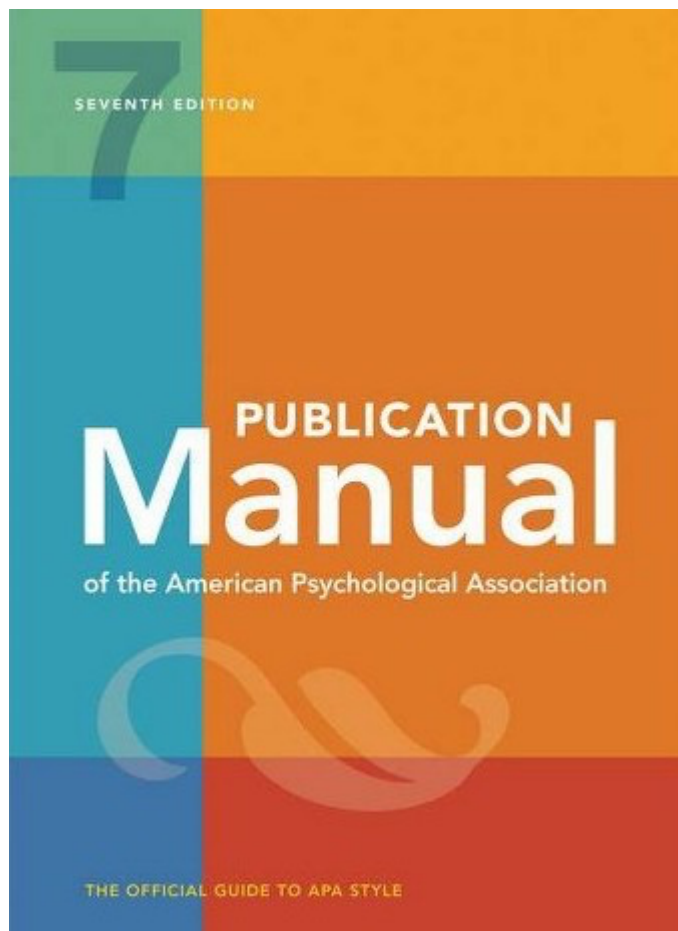
There are, however, specific courses where the thesis is explicitly incorporated into course assignments. The following are the MSCP courses that explicitly incorporate elements of the thesis into the syllabi:

PSYC#	Course	Semester	Year	Task
564	Adv. Research Methods	Fall	One	Literature Review
562	Statistics II: Regression	Spring	One	Data Analytic Plan
552	Psychometrics	Spring	One	Method
521	Ethics	Summer	One	Pre-Registration
565	Research Practicum	Fall	Two	IRB, Intro, Method
566	Thesis	Spring	Two	Complete Draft due May 1st

PSYC#	Course	Semester	Year	Task
599	Thesis Continuation	Every semester	Two+	Every semester until the thesis is complete

Chapter 5

Formatting - Overview



The thesis paper is completed in a manner consistent with the Publication Manual of the APA (7th Edition). Specifically, the following sections should follow, exactly, the guidelines defined by the 7th Edition:

- Abstract
- Introduction
- Method
- Results
- Discussion
- References
- Tables
- Figures
- Appendices

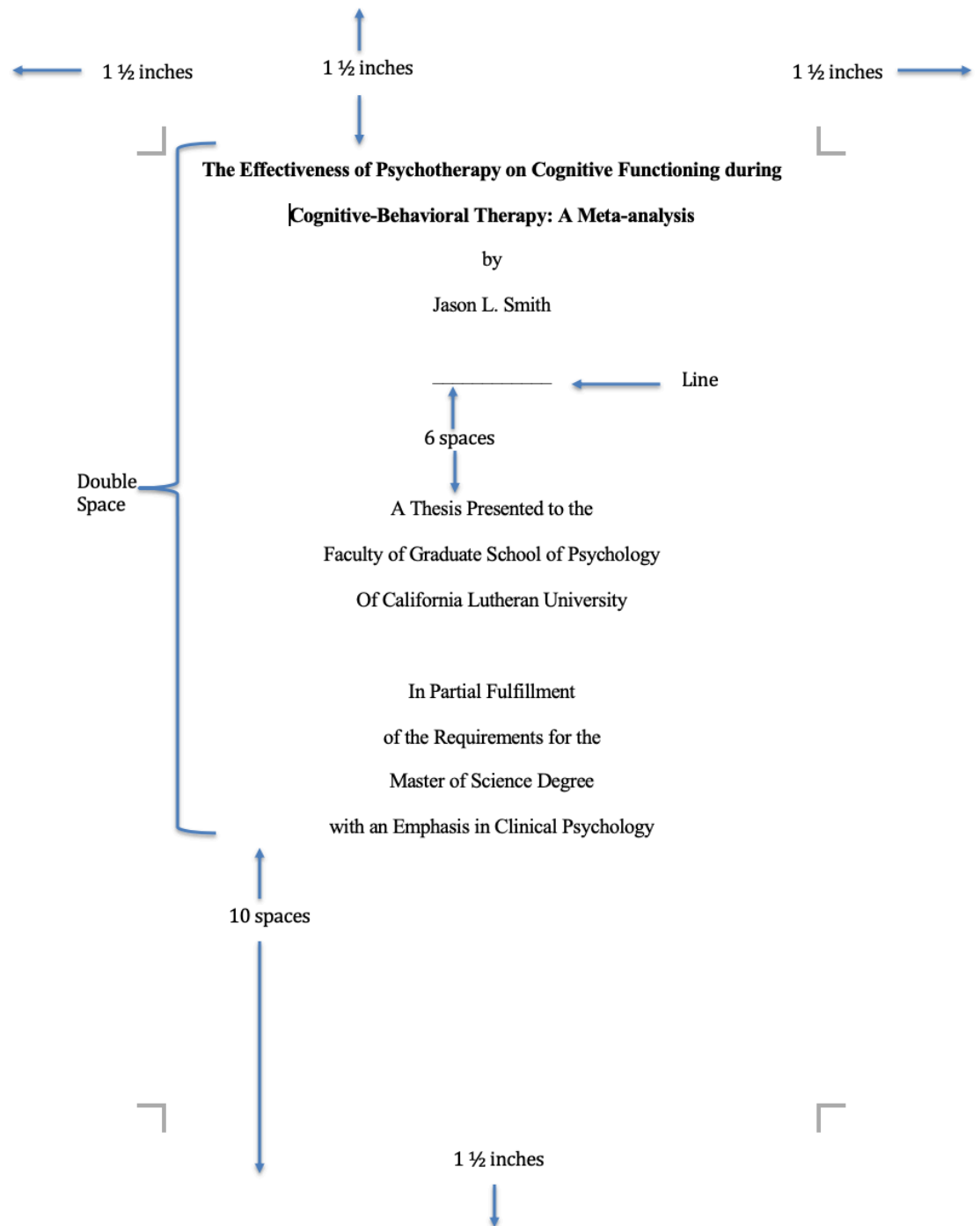
There are several sections that **do not** follow the 7th Edition of the Publication Manual:

- Title Page
- Signature Page
- Table of Contents

For examples of the sections that do not follow APA style please see the Thesis Materials section of the MSCP homepage in Blackboard and the examples in the following sections of this manual.

5.1 1. Title Page

This page provides the name of the thesis project, names of the university and school or department, and date of completion. The title page should be prepared in accordance with the sample page found in this section. The date at the bottom of the page is the month and year the degree is awarded. The title page is unnumbered but is counted as page “i.”



5.2 2. Signature Page

This page provides the name of the author and blank lines for the signatures of the committee members and the Graduate Dean of the appropriate School. The pages are signed when the members and Dean determine that the thesis or project is complete. The approval page should comply with the page form found in Appendix B. It should bear original signatures for all copies. The date at the bottom of the page is the date the degree is awarded; however, the page is not counted in the numbering system.

The signatures below certify that the Master Thesis of
Jason L. Smith
has been approved by the Graduate School of Psychology of the
California Lutheran University in partial fulfillment of the requirements
for the degree of Master of Science

Approved:

Sunyoung Park, Ph.D.
Chair

Jamie D. Bedics, Ph.D., ABPP
Reader

Date

Accepted:

Jamie D. Bedics, Ph.D., ABPP
Director, Master of Science in
Clinical Psychology

Richard J. ~~Holigrocki~~, Ph.D.
Dean, Graduate School of
Psychology

Note: The director and dean DO NOT
CHANGE

Date

5.3 3. Dedication (optional)

This optional page contains a brief dedication to the individual(s) whom the author wishes to honor. If included, this page is numbered as page “ii” (lower case Roman numeral).

5.4 4. Acknowledgements (optional)

This optional page lists persons and/ or institutions whom the author wishes to thank for their assistance in completing the thesis or project. Such assistance can be provision of personal, financial, or moral support, or access to data sets or subject populations. A brief statement as to the type of assistance provided may follow each person or institution named. If included, this page continues the lower case Roman numeral sequence begun above.

5.5 5. Table of Contents

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5.6 APA Sections of the Paper

6. Abstract (APA style)

The abstract follows APA style and typically completed in the spring of the second semester. A draft of the abstract, without results and without concluding statements, might be drafted during *PSYC 565 Research Practicum* during the of the second year.

7. Introduction (APA style)

As noted in the section “Literature Review Timeline,” the introduction is drafted during the first semester of the first year in *PSYC 564* and revised every semester of the year. The introduction is a comprehensive document that demonstrates the students’ expertise in the area under study.

8. Method (APA style)

As noted in the “Method Section Timeline,” portions of the Method section can be drafted during the spring semester and finalized during PSYC 565 in the fall of the second year. The method section defines the procedures of the study and is required for successful IRB approval at CLU. IRB is accomplished during PSYC 565 in the of the second year but students should review CLU IRB requirements as soon as possible. A link to the CLU IRB can be found here: <https://www.callutheran.edu/research/irb/>.

9. Data Analytic Method (APA style)

The data analytic plan can be developed during PSYC 562 in the spring of the first year and finalized during PSYC 565 in the of the second year. At CLU, we exclusively use the statistical program language called R. The data analytic section will include a power analysis as well a link to the study’s pre-registration of the data analysis.

10. Results (APA style)

The results are typically drafted during the spring of second year. *PSYC 566 Thesis* is an independent study unit and there are no class meetings. Instead, students meet with their thesis chair to review and write their analyses in the results section.

11. Discussion (APA style)

The discussion is a critical section of the research paper and is typically **10-pages** minimum. In the discussion the student provide the following:

- A summary of the proposed hypotheses and rationale.
- A review of the results in narrative form without the presentation of any statistics.
- A discussion of the implications of the results for each hypothesis.
- A discussion of future steps for each hypothesis.
- A discussion of the limitations of the study in addressing each hypothesis.

The discussion section demonstrates the student's ability to place their study in the context of the larger literature and think more philosophically. It is a space for creativity and ingenuity.

12. References (APA style)**13. Tables (APA style)****14. Figures (APA style)****15. Appendix 1 - Pre-Registration**

16. Appendix 2 - IRB Approval

17. Appendix # - optional as needed

Chapter 6

Thesis Binding

The following are instructions for binding your thesis. The binding of your thesis is *optional* and at your expense. You are responsible for the spelling, grammar, and correct APA formatting of your thesis. A bound thesis is a **final** thesis.

1. At least three (3) bound copies of the Thesis must be ordered.
 - a. One copy for the Graduate School of Psychology, one copy for the Thesis Committee Chair, and one personal copy for your possession. You can order more if you prefer (see #2).
 - b. The three copies must be printed on 25% rag or cotton fiber water-marked white paper, at least 20 pound weight, 8½ x 11 inches in size (EZERASE, or similar paper is not acceptable). A good example is Southworth Fine Business Paper, 25% cotton, 24 pound, white, stock #403C which is available for purchase from Office Depot, OfficeMax, and Staples. A similar 20 pound weight paper is also available.
 - c. Original signed signature pages on the same paper must be submitted with each of the three copies.
2. Additional personal copies may be ordered at the same time.
 - a. Personal copies may be printed on paper of the student's choice (e.g., 20 pound paper).
 - b. Signature pages for the personal copies may be photocopies of the originals as long as they are on paper that is identical to the rest of the thesis.
3. Copies for binding must be delivered to the Program Specialist.
 - a. The copies delivered to the Program Specialist are NOT to be bound - just packaged with bright colored paper separating the individual copies.

- b. Students are responsible for paying binding fees for all copies (the three required copies and for any additional personal copies). The cost is \$40 per copy (no matter the length), and to be paid by check to CLU. Prices may change.
 - c. The Program Specialist will forward the copies to the bindery as they are delivered.
 - d. Once the Program Specialist receives the copies and payment for binding, a change of grade will be submitted to the Registrar's Office.
 4. The bound copies are typically ready in about 6-8 weeks and are distributed as follows:
 - a. The Graduate School of Psychology copy and the Thesis Committee Chair copy will be delivered via campus mail by the Program Specialist.
 - b. Students will be notified when their personal copies are ready for pick-up.
 5. If you have any questions regarding the binding process, please do not hesitate to contact Mengmeng Liu, Graduate Program Specialist, at 805-493-3662 or at mengmengliu@callutheran.edu.
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Chapter 7

Thesis Commons



Thesis Commons is a place for students to publish their thesis. Thesis Commons is supported by OSF and is a way to both archive and showcase your work along with your OSF project.

Chapter 8

Presentations and Publications

The faculty hope you present your work at conferences and in publications. Presenting your work at conferences can be a very rewarding and fun experience. Typical conferences attended by CLU MSCP students include:

- Western Psychological Association
- American Psychological Association
- Association for Psychological Science

Faculty will also be happy to recommend various conferences given students specialized area of interest. Please remember to contact your chair *prior* to submitting your work to any professional outlet. Your committee members will typically be authors on all of your publically published work.

Chapter 9

Guidelines and Procedures

Successful completion of the thesis requires students to remain in good standing in accordance with the the guidelines regarding academic success and integrity set forth in the university's Graduate Catalog and the MS Clinical Psychology Handbook.

Integrity

Academic dishonesty diminishes the quality of scholarship and defrauds those who depend upon the integrity of the educational system. Consult the CLU Graduate Catalog for definitions of cheating, fabrication, facilitating academic dishonesty, and plagiarism. According to university policy, students who engage in academic dishonesty may be in jeopardy of disciplinary action, including suspension or expulsion from the university.

Failure to Complete the Thesis

Many students are unable to complete the thesis within the expected two years of study. Students who do not successfully complete the thesis within the first two years are required to maintain **continuous enrollment** by registering for *PSYC 599C-01 Thesis Continuation* **every semester** until the thesis is successfully completed.

Under special circumstances, students can take a leave of absence from the university. Such a leave of absence is completed in accordance with university policies which can be found through the university registrar.