California State University, Long Beach Department of Health Science Master of Public Health – Thesis Option

THESIS GUIDELINES

Introduction

Graduate students in the Master of Public Health (MPH) program may choose one of two options as their culminating experience: The comprehensive exam or the five-chapter thesis with oral exam. Students must either pass the comprehensive exam <u>or</u> successfully complete the thesis project and pass the *oral thesis exam* for degree completion. Both of these options test the candidate's broad mastery of core public health knowledge as well as community health education knowledge and skills.

The following document provides answers to common thesis questions, explains how the thesis experience relates to MPH program competencies, and specifies the suggested thesis-related timeline (including required procedures). In addition, appendices are included to guide the student through the thesis process.

Please note: Given the time-intensive nature of the thesis process (for both the student and thesis committee members), students should only select the thesis option if they are highly interested in engaging in research. In other words, test anxiety related to the comprehensive exam should not be a student's primary motive for completing the research thesis; HSC 626 is designed to facilitate preparation for the comprehensive exam, whereby reducing text anxiety. Since a research thesis requires the same high level of MPH program content mastery as the comprehensive exam, before making a decision about the culminating experience, students should read through these guidelines and determine if the thesis option is the right option for them and their goals.

Common Questions

THESIS BASICS

What is a thesis?

A thesis is a written document that demonstrates one's ability to design AND conduct independent and original research based on sound science. A thesis completed for the MPH degree program addresses an existing health-related research gap in the literature and should use qualitative and/or quantitative methods to answer a research question(s). NOTE: All theses completed for the MPH degree must have a public health focus.

What are the components of the HSC thesis document?

The thesis document is a five-chapter representation of the student's engagement in the scientific research process. Chapter 1 is an introduction to the health problem that specifies the research question(s) that will be addressed. Chapter 2 is a literature review that articulates what is currently known about the topic. Chapter 3 presents the methods employed to complete the research study. Chapter 4 presents results from statistical analysis (qualitative and/or quantitative). Chapter 5 is a discussion of findings, strengths, limitations, implications for the field of public health, and directions for future research (see Appendix F).

How long does it take to complete the thesis?

The timeline for completion of the thesis will vary depending on multiple factors, including but not limited to: whether one is a full-time or part-time student; if primary or secondary data are used; the IRB approval process; and the student's ability to work independently. Appendix A offers a recommended timeline where the majority of the work is completed within 3 semesters; this timeline is recommended for full-time students who aim to complete the MPH program within 4 semesters. Revisions to the timeline should be made in consultation with a student's thesis chair, particularly for students on a part-time schedule. For students who have successfully completed the thesis option, the average time to completion was 4.87 semesters, with a range from 4 to 7 semesters (if graduation was in summer, this counted as an extra semester).

How do students decide if the thesis is the right option?

Students who aim to pursue a doctoral degree (i.e., PhD in Public Health or DrPH) should consider the thesis option. Often times, the master's thesis can be used as a stepping stone for the doctoral dissertation. If a student has the goal of obtaining a PhD/DrPH AND possesses the following characteristics, the thesis option <u>may</u> be the right option for them:

- Self-motivated: Although there is a thesis committee, <u>the student</u> is responsible for executing the tasks required to complete the thesis;
- Ability to work independently: Thesis students must be able to develop and complete deadlines with minimal oversight;
- Patient and persistent: The literature review, data collection, data analysis, and report
 writing processes are all timely processes, as is the process of incorporating needed
 revisions:
- Receptive to Feedback: The thesis committee will expect the student to be receptive to their recommendations, as well as implement their feedback into drafts. Remember that the committee's job is to ensure sound science, so requests for revision serve to improve the final product.

How much will completing a thesis cost?

The cost of completing a thesis is contingent upon a number of factors. For example, some organizations with secondary data sets may require a fee for use of their data; some projects using primary data collection may require the use of incentives; students may choose to buy statistical software to analyze data off-campus; among others. There are also costs related to submitting the thesis to the Thesis Office (e.g., open access publishing, copyright registration, hardcover printing, etc.); since these submission costs change with time, students must check with the Thesis Office to find out current costs. Internal and external scholarships and other funding opportunities exist to cover research expenses (e.g., one internal mechanism available to support thesis students during the Spring 2018 semester was the Marion Pollock Scholarship). It is the student's responsibility to seek out and apply for funding, should this be necessary.

Can students really balance completing the required internship hours and completing the thesis requirements?

Yes, thesis students have successfully balanced both requirements. Previously, students have noted that if they only enroll in internship units and no other coursework, this has provided ample time to complete their internship hours while working on their thesis. The student should speak with their Thesis Chair and the Graduate Director to discuss strategies for successful completion of both requirements.

Students completing the thesis option are required to engage in an equivalent of three units (or 240 hours) of an internship experience; this is the **exact same** expectation for students completing the comprehensive exam. The internship is an additional facet of the degree program that is complementary and <u>not duplicative</u> of the thesis experience. Thus, it is the student's responsibility to determine how they will balance both internship and thesis requirements.

IF THE THESIS OPTION IS SELECTED...

THESIS TIMELINE CONSIDERATIONS

When does a student need to make the decision to pursue the thesis option?

Ideally, a student should know before starting the MPH program whether they want to pursue the thesis option. There are many reasons for this suggestion. First, the student can start to develop the thesis prospectus, which will help with the timely formation of the committee. Second, knowing the student is pursuing the thesis before starting the program should ensure completion of the courses required to enroll in thesis credits during the first two semesters. Third, full-time students often aim to graduate within two years. Deadlines established by the university require that the final thesis is submitted to the University Library relatively early in the semester in which a student plans to graduate. Therefore, in order to meet University and Department deadlines (see Timeline in Appendix A), it is best for a student to enter the program with their thesis topic in mind.

By the end of the student's <u>first semester</u>, students should finalize their choice between the thesis or comprehensive exam. The reason for this deadline is the decision affects a student's Program of Study (if the decision is not made early, it likely will delay graduation). Upon choosing the thesis option, students must complete HSC 590 Independent Study with their Thesis Chair (this class should be taken during the student's second semester); HSC 590 will be used to assess the student's potential for continued success on the thesis track (see below).

If a student successfully completes HSC 590 but no longer wishes to pursue a thesis, they must obtain approval from the Department Chair and Graduate Director to change to the Comprehensive Exam option. Moreover, if a student initially wanted to take the comprehensive exam but decides after their first year that they want to complete a thesis, the student must understand that their graduation timeline may be delayed.

What deadlines are applicable to the thesis?

The student should be aware of the University deadline for submission of the thesis. In order to ensure respect for everyone's time and schedule, all committee members must have a **minimum of two weeks to review** any thesis content. In addition, the <u>Health Science</u>

Department has an internal deadline for completion of the thesis. All final edits to the thesis after the thesis defense must be completed **one week prior** to the University deadline. Students should be aware that submissions past this deadline may be accepted but their graduation most likely will be delayed until the following term. Students not in compliance with this internal deadline should make all necessary financial and personal preparations to enroll in Graduate Studies hours for an additional term.

FORMING A COMMITTEE

Who will guide thesis students through the thesis process?

A student who chooses the thesis option is responsible for forming a thesis committee. The thesis committee includes a minimum of three members: The Thesis Chair, a tenured or tenure-track faculty member from the Health Science Department (Appendix B), and two other members (one of which must be CSULB **tenured or tenured track** faculty; and the third member must have at least a Master's degree) who can offer guidance in specific areas of expertise. Although it is possible to have more than three committee members, having more members is not recommended as it can create logistical difficulties when aiming to schedule meetings with all committee members.

The thesis committee should be finalized <u>prior</u> to enrolling in HSC 590. Though the student is responsible for writing the thesis, the Thesis Chair will review the student's work and provide recommendations for improvement. Moreover, the Thesis Chair advises the student on selection of committee members, certifies that the student has been properly prepared via coursework and research skills to complete the thesis project, and provides guidance for timeline to completion in a reasonable time. The Thesis Chair is also responsible for assigning grades for HSC 590 and HSC 698. Moreover, the Thesis Chair, in consultation with the committee, is responsible for determining if the student will progress from HSC 590 to HSC 698. For this reason, thesis students are expected to check-in with their Thesis Chair at least biweekly.

When approaching a potential Thesis Chair, the student should have already completed a draft of the <u>Thesis Development Worksheet</u> (Appendix C). More information on expectations for students and committee members are included in the appendices (See Appendices D and E).

Who should be on a student's thesis committee?

Ideally, a student should form a committee that includes someone with content knowledge related to the thesis topic, someone with a background in the planned statistical analysis, and someone with a background in research methods. Given that faculty research interests do not always align with student research interests, a student may have to create a committee whose research experience overrides their limited area of expertise in their specific topic.

As stated above, besides the Thesis Chair, at least one of the two remaining members must be a tenured or tenure-track faculty from any CSULB Department. The third member must be someone with a master's degree or higher (e.g., lecturer or professional who can provide content expertise).

The committee is approved by the Department Chair. Appendix D shows the form that must be completed when the thesis committee has been formed.

Is there a list of eligible Thesis Chairs for the H SC Department?

Please see Appendix B for a list of tenured or tenure-track faculty in the Health Science Department.

How should a student approach someone to be on their thesis committee?

Prior to approaching faculty to request their participation on a thesis committee, students should develop a one-page research prospectus with the help of Appendix C. Completion of this one-page prospectus will let potential committee members know the student has a specific plan of action for the research thesis. The student should then contact potential committee members to schedule an appointment to meet with them regarding the thesis, and their willingness and availability to serve in this capacity.

When is the last opportunity to change the composition of the thesis committee?

Faculty who serve as committee members invest an extensive amount of time and expertise to support their mentees through the process. Thus, it is not desirable or efficient for students to switch committee members as this will usually result in a delay to thesis completion. Changes to the committee composition should be carefully considered and are only permissible PRIOR to the approval of thesis chapters 1-3. After this approval, committee changes are reserved only for extreme extenuating circumstances and require the Department Chair's approval.

What happens if a Thesis Chair is no longer able to serve in this capacity for a student? At times, a thesis chair may no longer be able to maintain their role on a committee. This may be due to competing priorities, or due to disagreements about a student's progress and/or the scientific direction of the thesis project. Although preventing the former scenario is difficult, one preliminary method to prevent the latter scenario is through the requirement to start with HSC 590. In cases where the only feasible solution is a new Thesis Chair, it is the student's responsibility to discuss this with the current Thesis Chair, the Graduate Coordinator and the Department Chair. Reaching out to thesis committee members may help to identify a new thesis chair; it may be possible to promote an existing committee member to the Thesis Chair position; however, it will still be the student's responsibility to find a new, third committee member, and resubmit the appropriate forms.

How should a student address differences of opinion or conflict that may occur within a thesis committee?

It is the student's responsibility to work collaboratively and **communicate** openly with all committee members to ensure support and a mutually beneficial experience. During the scientific process, differences of opinion are a common occurrence. The Thesis Chair has ultimate approval authority over the various stages of the thesis process. However, it is important to recognize that these decisions are made in consultation with all committee members.

A student who experiences conflict with one or more committee members should seek to resolve the conflict directly. If a conflict cannot be resolved by approaching the Thesis Chair and/or Committee members directly, the student must seek guidance from the Health Science Department Chair. Once a full committee has been created and the appropriate forms submitted, requests to change committee members are **not** encouraged, and will only be considered when a requested change is confirmed as being necessary by the Department Chair, Graduate Director, and existing committee members. For tips on successful conflict resolution, see Appendix H.

How should a student address non-responsive committee members?

Each student is encouraged to schedule regular weekly/biweekly meetings with their Thesis Chair to provide regular thesis guidance. This should reduce the likelihood of non-responsiveness between the Thesis Chair and the student. Students may not interact as regularly with other committee members. Therefore, it is the student's responsibility to maintain regular communication with their committee members. In some cases, a student may encounter a chair/committee member who is non-responsive to email correspondence. If this occurs, the student should promptly attend office hours to speak directly to the chair/committee member. Students should follow the conflict resolution steps discussed in Appendix H if efforts to speak directly with the Thesis Chair or committee member are unsuccessful or do not result in changes in communication.

MOVING THROUGH THE THESIS PROCESS

What approvals are needed to move through the thesis process?

Thesis students will need approval to enroll in HSC 590 and HSC 698. Approval to enroll in HSC 590 requires submission of the thesis contract (see Appendix G) and creation of the competency evaluation form (see Appendix H. Approval of thesis Chapters 1-3 is also required from ALL thesis committee members before beginning any data collection (if collecting primary data) or before conducting data analyses (if using secondary data). In order to schedule the thesis defense, approval of the fully completed five-chapter thesis is required (approval entails that there are no major issues with methodology, analyses or interpretation in the complete product, although additional minor edits may still be needed). Finally, approval must be obtained to submit the five-chapter thesis with the Signature Page to the University Thesis Office. It is the responsibility of the student to ensure signature forms have been completed along each step of the thesis process.

What must be done before a student can enroll in thesis (HSC 698) credits?

In order to thoroughly evaluate the student's thesis commitment and to begin the process with adequate preparation, the student must enroll in HSC 590 Independent Study for a letter grade as a prerequisite for HSC 698. The Thesis Committee Form (Appendix D) must be on file with the Graduate Director before a student can enroll in HSC 590 and 698. The purpose of HSC 590 is to facilitate the work needed on the student's thesis, and to allow the student's thesis committee to assess the student's ability to successfully complete the thesis process. Once the HSC 590 requirements (i.e., Chapters 1 and 2 are ready for full committee review, if not already finalized, and a draft of Chapter 3) are met, all three committee members will make this assessment. To enroll in HSC 698, the student must also advance to candidacy and complete the following courses in the HSC Department: 500, 503, 570, and 696. The student must provide a completed form (Appendix D) to the Program Director. The Graduate Director will verify if the student has met these requirements in order for them to receive a permit to enroll in thesis hours via HSC 698.

What does it mean to defend the thesis?

A thesis defense entails students presenting their thesis research and undergoing an oral exam to assess whether their attainment of program competencies is sufficient to earn the MPH degree. The thesis defense can only be scheduled after all committee members approve the five-chapter thesis. Although minor edits may be needed, approval implies that there are no major issues (e.g., methodology, analyses, interpretation, etc.) with the complete product. All committee members must be present for the thesis defense. During the thesis defense, the student presents an overview of all five chapters of the thesis and then answers questions during an oral exam period. At this time, the committee may also provide recommendations for revisions to incorporate into the thesis—these revisions must be made prior to submitting a thesis to the Thesis Office. The presentation portion of the defense is open to the public, while the oral exam portion is closed. Students may request that their Thesis Chair publicize the thesis defense to the department (this is optional). See Appendix J for complete details regarding the thesis defense.

DATA-RELATED THESIS LOGISTICS

Do thesis students need to collect their own data?

Thesis students may collect their own data for the thesis, but this is not a requirement. The use of pre-existing, de-identified data for secondary analysis is strongly encouraged in order to help students meet their graduation timeline. However, if a student is interested in gaining experience in data collection, they is encouraged to collect their own data. Please note that collecting primary data may require a student to extend enrollment past the two-year plan of study and will require IRB approval. There is also an IRB review process for secondary data analyses, but it may not be as time-intensive. This is something that should be carefully explored with the Thesis Chair before a decision is made.

What if a thesis student wants/needs to collect primary data?

For research questions that cannot be addressed using pre-existing data, original research with primary data collection may be required. Students should consult with their Thesis Chair about the steps needed to collect primary data and develop a plan for data collection that is feasible and appropriate for the research question. Students should also meet with the Thesis Chair about completing the IRB process, as IRB approval is required **PRIOR to engaging in any form of data collection for research purposes**.

How do thesis students obtain secondary data?

Several options exist for obtaining secondary data. Large public use data files are available at no cost (e.g., the California Health Interview Survey). Note that some public data sets require advanced statistical skills. As such, it is the student's responsibility to thoroughly investigate any expertise needed to use a given data set. The student will need to find the data source that best fits their research needs. Also, faculty may have datasets from past projects available for analysis. Thesis students must formally request permission to use existing data sets. Regardless of the type of secondary data chosen, the student must be able to answer the research question using the data available. Moreover, all students conducting secondary analyses must consult with the IRB office to verify whether formal approval to proceed to data analyses is required.

DEFENDING THE THESIS

What does it mean to successfully defend the thesis?

Successful defense of the thesis means all committee members were satisfied with the oral presentation, oral defense, and the five-chapter thesis. Although committee members may be satisfied, they may still require edits to the thesis. It is understood that thesis committee members are not obligated to sign the signature page until they are satisfied with the student's ability to incorporate needed edits into the thesis document.

What happens if a student does not successfully defend the thesis?

If a student does not successfully defend their thesis, they will be given one more opportunity to attempt a successful defense. This second chance requires the student to repeat the oral presentation and retake the oral defense exam.

Is a student done after submitting the thesis to the Thesis Office in the University Library?

Not quite. After submitting the thesis, the library may ask for revisions (which is why the prereview service is recommended), and the student submits these revisions prior to the thesis being accepted. Further, the student may be expected to work collaboratively with their thesis committee to prepare the completed research for publication in a peer-reviewed journal.

Thesis and MPH Competencies

Students completing the MPH degree must show they have fulfilled MPH Program Competencies. The MPH program has identified **8** of the program competencies that must be met through the thesis project. Students completing the thesis option will work with the Thesis Chair to identify any additional competencies that are relevant to the thesis topic and/or methods and add them to the required evaluation form. (Please see program competencies on the Health Science program website or the Graduate Student Handbook.) The Thesis Chair will complete the evaluation form following completion of the thesis defense and submission of any changes required from the defense; this form is filed with the Program Director.

All students must fulfill the following core set of competencies upon completion of the thesis option:

Core Public Health:

- Select quantitative and qualitative data collection methods appropriate for a given public health context
- Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
- Interpret results of data analysis for public health research, policy or practice
- Communicate audience-appropriate public health content, both in writing and through oral presentation
- Apply systems thinking tools to a public health issue

Community Health Education:

- Synthesize community assessment findings
- Develop data analysis plan for community health research
- Provide expert assistance for community health programming

Appendix A:

Suggested Thesis Timeline

You have decided to pursue the thesis option...now what? Following this timeline should keep students on track to graduate within 2 years. The timeline is based on a two-year schedule for students who start the program in the fall (i.e., Fall-1st Semester; Spring-2nd Semester; Summer Term; Fall-3rd Semester; Spring-4th Semester). Note that the completed thesis must be submitted early in the 4th semester to meet University (not Department) deadlines, or students will need to enroll in another semester of graduate studies.

Fall-1st Semester

- -Read MPH Thesis Guidelines Manual
- -Attend Thesis Workshop
- -Use coursework (e.g., 570) to develop expertise in a specific health topic
- -Use coursework (e.g., 570) to identify a gap in the literature to pursue
- -Draft Thesis Development Worksheet (see Appendix C)
- -Start developing one-page prospectus
- -Submit prospectus to potential thesis chairs
- -Determine a thesis chair
- -Determine thesis committee members
- -Submit the signed Thesis Committee Form 1 to the Program Director
- -Submit the signed Thesis Contract (Appendix G) to the Program Director
- -Submit Thesis Committee Form to Graduate Director
- -Enroll in HSC 590 for second semester

Winter Break

Spring-2nd Semester

- -Attend University Library Thesis Workshop to review formatting guidelines
- -Discuss and finalize topic and research design with Thesis Chair as part of HSC 590
- -Develop template using sample theses from past Health Science students as part of HSC 590
- -HSC 590 Deliverables: Finalized prospectus; Complete Chapters 1-2; Draft of Chapter 3 (ready for IRB submission)
- -Upon Completion of HSC 590: Meet with committee to determine whether 1) student wants to continue with the thesis project and 2) Thesis Chair (and committee) believe student has made adequate progress to continue as a thesis student.
- -Submit draft thesis chapters 1-3 (with IRB application if required) to Thesis Chair).
- -Incorporate feedback from Thesis Chair into Chapters 1-3
- -Submit revised proposal to all committee members
- -Incorporate feedback from committee into Chapters 1-3
- -Receive approval from all committee members to move to data collection/data analyses.
- -Reconfirm participation of all committee members
- -Apply for <u>Summer Student Research Stipend</u>. More information can be found at using the following link: http://web.csulb.edu/divisions/aa/research/funding/
- -Apply for the <u>Marion Pollock Endowed Scholarship</u>. This scholarship supports graduate students completed thesis-related work in school or community health education IN THE EVENT IRB APPROVAL IS NECESSARY:
- -Complete CITI Training (for IRB) (http://www.csulb.edu/divisions/aa/research/compliance/)
- -Contact IRB Coordinator to make them aware of your project
- -Obtain, in writing, notification that you do/do not need to submit an IRB application
- -Submit application to IRB and make changes required by IRB.

Summer

- -Data Collection/Acquisition
- -Data Analysis
- -Write Chapters 4 & 5

Fall-3rd Semester

- -Register for Thesis HSC 698
- -Get approval from Thesis Chair to submit complete draft to thesis committee
- -Incorporate feedback from committee into completed thesis
- -Provide thesis committee with draft at least two weeks before defense
- -Schedule thesis defense. Students may contact the Health Science Department Coordinator for assistance scheduling a room for the Thesis Defense (if not being completed virtually). Please note that students may only schedule the thesis defense after obtaining the appropriate committee member signatures indicating approval to proceed to the defense. Approval implies that there are no major issues with the complete product (although there may be edits needed, they would not be considered major issues with methodology, analyses, etc.).
- -Defend thesis

Winter Break

Spring-4th Semester

- -Register for thesis HSC 698
- -Incorporate revisions from thesis committee
- -Go through Thesis Office Pre-Review Service
- -Obtain committee member signatures on signature page of thesis
- -Obtain department chair signature on signature page of thesis
- -Obtain online thesis author form
- -Submit final thesis to Thesis Office by deadline
- *Note: Even if student submits the final thesis during the Spring Semester, but does so AFTER the University deadline, student will have to enroll in a summer course (Graduate Studies 700)
- -Submit final thesis to Campus Copy Center for fee payment and duplication
- -Call Thesis Office with receipt number
- -Provide Thesis Chair with Verification of Dissemination
- -Obtain Thesis Clearance Memo
- -Prepare manuscript-style document for submission to peer-reviewed journals (if such an agreement was made between student and Thesis Chair)

Appendix B

List of Eligible Thesis Chairs in Health Science Department

Tenure or Tenure-Track Faculty (as of 8/20/2020)

Faculty:

Veronica Acosta-Deprez, PhD, CHES (Emeritus)
Kamiar Alaei, MD, DrPH (Current Department Chair)
Niloofar Bavarian, PhD, MPH
Laura D'Anna, DrPH, MPA
Gail Farmer, DrPH
Melawhy Garcia, PhD, MPH
Fiona Kawa Gorman, EdD, MPH
Sarath Gunatilake, DrPH, MD (Emeritus)
Amber Johnson, PhD, MPH
Judy Jou, PhD, MA
Javier Lopez-Zetina, PhD, MA
Selena Nguyen-Rodriguez, PhD, MPH

*Note: Emeritus faculty generally have less availability

Appendix C

Thesis Development Worksheet

The purpose of the worksheet is to help students prepare their thesis topic, data collection plan and data analysis plan. This will help students develop the one-page prospectus that is to be provided to prospective thesis committee members. The following questions are to help students develop a quantitative research study. If a student is considering a qualitative research study, please note that qualitative studies can take longer to complete than quantitative studies. Therefore, students should discuss their interest in pursuing a qualitative research approach with their prospective Thesis Chair.

In a one-page document, answer the following questions:

Background

- o What is the public health topic and population being examined?
- o Why is the topic being studying important?
- o What research gap does the thesis address?
- State the study aim/research question
- State the study hypotheses

Methods

- Identify the source of secondary data (i.e., pre-existing survey) that will be used to answer the research question (Secondary data analysis is encouraged; if secondary data analysis is not an option, explain why.)
- Describe the sample, including sample size, data collection time period, and sampling method
- Specify the variables to be analyzed and how they are measured
- Specify the analytic steps that will be taken <u>prior to</u> running the main analysis/model (e.g., descriptive and assumptions to be tested)
- Specify the main analyses to be run and the steps that will be taken to run the main analyses

Results

- Specify how descriptive statistics would be reported
- Specify tests that would be used to examine assumptions (if conducting quantitative analyses)
- Specify the results that would be used to examine the main research question

Conclusion

- o Identify possible limitations of the study/approach
- Explain why this is an important research question to pursue in spite of limitations

Appendix D: Committee FORMS 1-4

CSULB Health Science Department MPH Thesis Committee Forms & Instructions

These forms are to be completed by the CSULB MPH graduate student choosing the thesis with oral exam as their culminating experience. Form 1 should be filed with the Graduate Director by the first or second semester (if willing to extend graduation) in the graduate program. A signed version of Form 1 MUST be filed with the Graduate Director prior to enrolling in HSC 590 (students will not be given permission to enroll in thesis units without this document on file). Prior to submitting this document, each committee member should have reviewed the student's thesis prospectus. Form 2 should be filed after the completion of HSC 590 should the student continue to pursue the MPH thesis option. Form 3 should be filed after the student has received approval of chapters 1-3 from all thesis committee members to move forward with data collection and/or data analysis and thesis committee member have recommitted to serving on the thesis committee. Form 4 should be filed after the student has received approval to move forward with the thesis defense (approval implies that there are no major issues with the complete product, methodology, analyses, etc).

Original signatures are required of all committee members.

FORM 1			
By submitting this form to the Graduate Director, you acknowledge that you have read the CSULB MPH Thesis Guidelines and have had each committee member review your Thesis Prospectus. Name:			
Student ID #:			
E-Mail:			
Thesis Chair: (Must currently hold a tenure or tenure-track faculty position in the Health Science Department at CSULB):			
Thesis Chair E-Mail:			
Current Semester:			
Expected Semester of Thesis Defense:			
Title of Thesis:			
Aim of Thesis (2-3 Sentences):			

Updated: 9/14/20 15

Primary or Secondary Study:

(Student Signature and Date)

By signing below, you acknowledge that you have read the CSULB MPH Thesis Guidelines, the student's Thesis Prospectus, and that you agree to serve on the above-listed student's Thesis Committee. Committee member agreement to serve on the thesis committee should be re-evaluated after the committee has reviewed the first three chapters of the thesis.

Thesis Chair (Print Name):

Thesis Chair Department: Health Science

Thesis Chair (Sign and Date):

Second Committee Member (Print Name):

Second Committee Member Department (can be tenured or tenure-track from any CSULB department):

Second Committee Member (Sign and Date):

Third Committee Member (Print Name):

Third Committee Member Department/Organization (must have at least a master's degree):

Third Committee Member (Sign and Date):

OPTIONAL

Fourth Committee Member (Print Name):

Fourth Committee Member Department/Organization (must have at least master's degree):

Fourth Committee Member (Sign and Date):

Fifth Committee Member (Print Name):

Fifth Committee Member Department/Organization (must have at least master's degree):

Fifth Committee Member (Sign and Date):

FORM 2

By signing below, the student acknowledges that they intend to proceed with the MPH Thesis Option and will complete chapter 3 and request approval of chapters 1-3 from all committee members before being allowed to move on to data collection or analysis.

Thesis Student (Print Name): Thesis Student (Sign and Date):

Thesis chair signature indicates that the HSC 590 requirements have been satisfactorily fulfilled and can continue on the Thesis Option.

Thesis Chair (Print Name): Thesis Chair Department: Health Science Thesis Chair (Sign and Date):

FORM 3

By signing below, the student acknowledges that they will proceed with the MPH Thesis Option and subsequently enroll in HSC 698. Students are <u>unable to switch</u> to the comprehensive exam option once Form 3 is submitted to the Graduate Director.

NOTE: If a student enrolls in HSC 698 but does not complete the thesis, they will not receive credit for HSC 698 units (even if the course was previously completed, the student's grade will automatically change to a W if a thesis is not successfully completed).

Thesis Student (Print Name): Thesis Student (Sign and Date):

Committee member signatures indicate agreement to continue service on the thesis committee.

Thesis Chair (Print Name):

Thesis Chair Department: Health Science

Thesis Chair (Sign and Date):

Second Committee Member (Print Name):

Second Committee Member Department (can be tenured or tenure-track from any CSULB department):

Second Committee Member (Sign and Date):

Third Committee Member (Print Name):

Third Committee Member Department/Organization (must have at least a master's degree):

Third Committee Member (Sign and Date):

OPTIONAL

Fourth Committee Member (Print Name):

Fourth Committee Member Department/Organization (must have at least master's degree):

Fourth Committee Member (Sign and Date):

Fifth Committee Member (Print Name):

Fifth Committee Member Department/Organization (must have at least master's degree):

Fifth Committee Member (Sign and Date):

FORM 4

Thesis committee member signatures indicate that the student has fulfilled the requirements to proceed with the thesis defense. In other words, there are no major issues with the complete product (i.e., no major issues with methodology, analyses, interpretation, etc), although there may be additional edits needed. Students may show this form to the Department Coordinator for assistance scheduling a date and time to for the defense. Students should also determine times of availability for each committee member before seeking assistance with scheduling.

Thesis Chair (Print Name):

Thesis Chair Department: Health Science

Thesis Chair (Sign and Date):

Second Committee Member (Print Name):

Second Committee Member Department (can be tenured or tenure-track from any CSULB department):

Second Committee Member (Sign and Date):

Third Committee Member (Print Name)

Third Committee Member Department/Organization (must have at least a master's degree):

Third Committee Member (Sign and Date):

OPTIONAL

Fourth Committee Member (Print Name):

Fourth Committee Member Department/Organization (must have at least master's degree):

Fourth Committee Member (Sign and Date):

Fifth Committee Member (Print Name):

Fifth Committee Member Department/Organization (must have at least master's degree):

Fifth Committee Member (Sign and Date):

Appendix E

Thesis Committee Responsibilities

This document outlines the roles and responsibilities of thesis committee members. Note that these are meant to provide guidance, and more definitive descriptions should be delineated by the individual committee. The goal of defining responsibilities should be to ensure an efficient process that will support the successful and timely completion of the thesis project for each student.

Chair

- Primary mentor for the student (holds regular meetings with student)
 - "Regular" meetings should be defined by the student and Chair. This may entail biweekly meetings or weekly electronic communication, etc.
- Assists student in forming the thesis committee
- Works with student to develop a timeline for thesis completion (based off suggested timeline)
- Collaborates with student to develop/revise/finalize research question(s)
- Supports the student in carrying out all stages of the thesis project
 - The type of support needed should be tailored to individual student needs, e.g., identify relevant resources, work through preliminary analyses together, etc
- Guides the student through the IRB process
- Works closely with student to develop drafts of chapters
 - o Provides detailed feedback on all drafts
 - Guides creation of more developed versions to submit to full committee
 - Ensures the first three chapters are reviewed and approved by full committee prior to start of data collection (if applicable) and data analysis
- Communicates with the committee to ensure timeline for project completion
- Responsible for assigning HSC 590 letter grade. The Thesis Chair will advise the Department Chair on the earned grade based on the stated requirement for HSC 590.
- When student completes HSC 590, will consult with committee members and make final decision if the student has made sufficient progress to be able to continue on the thesis track. May also confirm with committee members if they want to maintain their involvement on the thesis committee.
- Each semester after HSC 590 is completed, will re-evaluate student progress in consultation with committee members, to decide if student's progress has been sufficient to stay on the thesis track.
- Prepares student for oral defense (e.g., by having student practice defense and/or reviewing presentation slides)

Members

- Offer general guidance for direction of project (may hold periodic meetings with student)
- Available to answer questions related to development or implementation, as needed
- Identify relevant issues student should consider in developing project
- Provide more general, bigger picture feedback for chapters (more developed/semi-final drafts)
- Review the first three chapters of the thesis; approve chapters 1-3 before student is allowed to commence data collection (primary data) and/or data analysis (secondary data)
- Read five-chapter thesis prior to thesis defense, and come to defense prepared with recommended edits and questions for the oral defense

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- If invited for specific expertise
 - May take lead in mentoring student on some components of project (holds one-on-one meetings with student, and with Chair, as needed)
 - Provides detailed support and guidance in area of expertise
 - Works closely with student to develop drafts related to area of expertise

For all students, a final agreement on the roles and responsibilities of each committee member should be determined as early as possible in the thesis process.

With respect to authorship, a conversation should be had with each committee member to discuss authorship or acknowledgement for posters/papers based on substantive contribution.

Appendix F

Thesis Document Content List

This document content list has been prepared for a quantitative study. The document list will be different for a qualitative study. Please make sure that you work closely with your Thesis Chair to develop an appropriate document list should you pursue a qualitative research study.

*Note: In the event this content list contradicts the content list of the Thesis Office, following the Thesis Office guidelines is recommended.

ABSTRACT
BLANK PAGE
TITLE PAGE
COPYRIGHT PAGE
ACKNOWLEDGEMENTS
TABLE OF CONTENTS
LIST OF TABLES
LIST OF FIGURES

Chapter 1. INTRODUCTION
Background
Problem Statement
Present Study
Hypothesis
Importance of Study
Definitions

Chapter 2. LITERATURE REVIEW
Separate section for each variable in your analysis
Summary

Chapter 3. METHODS
Participants and Sampling Methods
Study Design and Procedures
Measures
Statistical Analysis Plan

Chapter 4. RESULTS
Descriptive Statistics (including demographic information)
Primary Analyses

Chapter 5. DISCUSSION
Summary
Compare/Contrast with past research
Limitations
Public Health Implications
Recommendations for Future Research

REFERENCES

APPENDICES

Appendix G

CSULB Health Science Department MPH Thesis Contract

THIS COMPLETED CONTRACT MUST BE SUBMITTED TO THE PROGRAM DIRECTOR BEFORE A PERMIT TO REGISTER FOR HSC 590 WILL BE ISSUED

Thank you for your interest in collaborating on your thesis. I view the thesis, and especially the Thesis Student/Thesis Chair relationship as a mutually beneficial experience. However, an experience is only as beneficial as the effort put in by all parties. Moreover, the thesis experience is enhanced when expectations are stated prior to the initiation of a formal collaboration.

As such, the following are my expectations of my thesis students, my expectations for myself as your Thesis Chair, and important guidelines to understand regarding the thesis process.

- I. Mentee (_____) should ...
 - a. Pledge to reply promptly to e-mails (within 24 hours)
 - b. Pledge to notify mentor if weekly goals will not be achieved
 - c. Pledge to ask questions if anything is unclear
 - i. When asking questions, attempt to answer own question first
 - d. Pledge to attend meetings punctually and prepared (e.g., having completed assigned tasks, prepared with questions)
 - e. Pledge to be respectful and courteous
 - f. Pledge to log what was done for research hours

Thesis Specific Expectations

- a. Pledge to read the complete CSULB MPH Thesis Manual
- b. Pledge to complete CITI Training
- c. Pledge to enroll in HSC 590 as a means of assessing my suitability for thesis
- d. Pledge to understand that the decision about formally proceeding to thesis is contingent on my Chair's evaluation of my performance in HSC 590
- e. Pledge to not share datasets and other intellectual property
- f. Pledge to be responsive to feedback provided on drafts
- g. Pledge to save each new version of a draft, and keep comments and edits until they are incorporated into manuscript
- h. Pledge to follow university conduct policies when preparing the thesis
- i. Pledge to not proceed to data collection and/or analyses until 1) all of my committee members have approved my Ch.1-3 and 2) the university IRB has approved my study
- j. Pledge to understand that my Thesis Chair is the sole person responsible for assigning my grade and I can only receive the grade that the Thesis Chair assigns
- k. Pledge to respect the time invested by committee members and reserve requests for committee changes for extreme circumstances wherein a solution cannot be mutually agreed upon with the committee member
- I. Pledge to understand that once Chapters 1-3 are approved, I can no longer change my committee composition (barring extenuating circumstances)
- m. Pledge that I will not revert to the Comprehensive Exam option after receiving approval from Chapters 1-3.
- n. Pledge to address issues with any committee members directly
- Pledge to communicate with the Department Chair to resolve issues that cannot be resolved

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	p.	Pledge to understand that if I enroll receive credit for HSC 698 units (ev grade will automatically change to a	en if the course was	previously completed, your
II.	a. b. c.	As a mentor, I () pledge to the following a. Pledge to be clear about goals and expectations b. Pledge to reply promptly to emails (within 48 hours during the work week) c. Pledge to provide feedback on drafts within 14 days d. Pledge to notify you directly and immediately about issues		
St	ude	nt Mentee Name:	Signature:	Date:
Fa	cult	v Mentor Name:	Signature:	Date:

Appendix H

COMPETENCY EVALUATION FORM

CSULB Health Science Department Evaluation of MPH Competencies for Thesis

Students completing the MPH degree must show they have fulfilled at minimum the 8 program competencies that must be met through the thesis project. This evaluation form should be amended to include additional competencies, if relevant. This evaluation form must be completed to confirm all agreed upon competencies have been met.

Once the initial evaluation form has been **created**, this must be submitted to the Program Director to be able to receive a permit to register in HSC 590. The **completed** evaluation form must be submitted by the Thesis Chair to the Department Chair and Program Director for student final thesis grade to be submitted (evaluation may be completed electronically, see faculty BeachBoard for link).

The Thesis Chair will complete the evaluation form following completion of the thesis defense and submission of any changes required from the defense; this form must be filed with the Program Director.

Instructions for the Thesis student: Fill in your name and thesis topic as well as your thesis chair's name in the spaces provided. After discussing competencies with your Thesis Committee Chair, fill in any additional competencies that you agreed to add in the appropriate table. Submit an electronic version of this form when you request permit to register for HSC 590.

STUDENT NAME: THESIS TOPIC:

Instructions for the Thesis Committee Chair: Complete the evaluation of competencies for the thesis student upon approval of the thesis manuscript for submission to the Thesis Office and passing of the thesis defense. Rate the student's performance using a grade percentage format as would be used for a course assignment (e.g., 90% and above is an A); insert the assigned percent for each competency in the space provided. A passing score for the competency evaluation requires an average score of ≥80% across all competencies (required and any additional ones added). In the Comments section, provide, at minimum, an overall assessment of the student's competence, including the average score for your ratings. For any ratings below 70% a comment is required; additional comments to explain the individual ratings provided may be included if desired. Submit your ratings and comments electronically using the evaluation link found on BeachBoard.

Required Competencies		Evaluation Rating (%)
1.	Select quantitative and qualitative data collection methods	
	appropriate for a given public health context	

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2.	Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	
3.	Interpret results of data analysis for public health research,	
	policy or practice	
4.	Communicate audience-appropriate public health content, both	
	in writing and through oral presentation	
5.	Apply systems thinking tools to a public health issue	
6.	Synthesize community assessment findings	
7.	Develop data analysis plan for community health research	
8.	Provide expert assistance for community health programming	

Please complete the following section, if appropriate.

Additional	Competencies Relevant for the Thesis Project	Evaluation Rating (%)
9.		
10.		
11.		

Note: additional rows may be added as needed

Comments:		
THESIS CHAIR NAME:		
THESIS CHAIR SIGNATURE:	DATE:	

Appendix I

Protocol for Changing Committee Members

The thesis project is a significant endeavor that requires extensive commitment by the student as well as committee members. It is important to establish a committee that will be able to provide guidance and support throughout the process. It is just as important that the student be respectful of committee members' time and honor their recommendations. Moreover, changes to the thesis committee are restricted after the submission of Appendix D: Form 2, which confirms your thesis committee composition and your commitment to the MPH Thesis option. While it is understood that events may occur to require changes in committee membership, it should only happen under approved and necessary circumstances.

Forming the Thesis Committee

The committee should be identified through iterative discussions with the Thesis Chair. The committee MUST be formed before enrolling in HSC 590. It is recommended that the student form their committee during their first semester in the MPH program. The student must submit the Thesis Committee Form 1 (see Appendix D above) to the Graduate Director to officially document members of the committee.

Conflict Resolution

Requests to change the thesis committee composition can often be avoided through conflict resolution. The following procedure should be followed <u>before</u> requesting changes to the thesis committee.

- 1) If you experience conflict with a sitting committee member, you must first discuss concerns with your Thesis Committee Chair. This is an opportunity for students to receive initial guidance for addressing conflict with a committee member.
- 2) You should then schedule a meeting with the thesis committee member. You should discuss these concerns and determine appropriate solutions.
- 3) If your concerns are with the Thesis Committee Chair, schedule a meeting with them to discuss your concerns and determine appropriate solutions.
- 4) If appropriate resolutions are not reached with either the Thesis Chair or the sitting committee member, you may then schedule a meeting with the Department Chair. The Department Chair is the final conflict arbitrator and will consult with the Graduate Director as needed.
- 5) If no resolution can be reached through arbitration with the Department Chair, you may consider following the <u>Changes to the Committee Protocol</u> below. Please note that all final decisions on changes to the committee must be approved by the Department Chair.

Changes to the Thesis Committee

After members have agreed to serve on the committee, they will re-evaluate their participation after the student completes Chapters 1-3 of the thesis. Committee members may be unable to commit an adequate amount of time to the student thesis, or they may be dissatisfied with the student's thesis progress and/or scientific merit of the proposal. At this time, committee members are able to discontinue their service on the committee. If you have been approved to enroll in HSC 698 but a committee member is unable to continue his or her service on your committee, you may seek another thesis committee member.

However, if conflict resolution procedures are unsuccessful and the student wishes to request a change in committee members, the following steps must be followed:

1) The student must meet with the Department Chair and Graduate Director to provide a strong rationale for the request for committee member change.

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- 2) The Department Chair and Graduate Director will discuss the issue with the committee member to ensure all information is consistent across parties.
- 3) The Department Chair, Graduate Director, and Thesis Chair will come to a decision as to whether or not the change is warranted.
- 4) The student will follow the decision that was made.

Appendix J

Required Courses: HSC 590 & HSC 698

In order to ensure timely progress and completion of the thesis, as well as to guarantee course credit, students who choose the thesis option must enroll in HSC 590 during their second semester. Only after successful completion of HSC 590, approval of the Thesis Chair, and meeting other required pre-requisites will students be able to enroll in HSC 698.

HSC 590: Independent Study

The student will request a permit to register in HSC 590 from the Graduate Director to commence working on their thesis. They must have established their thesis committee and submitted the Thesis Committee Form prior to receiving permission to enroll in HSC 590. The student will create a syllabus with the Thesis Chair that identifies required components and timeline to complete milestones. The student must complete required content and remain on track with the timeline set forth to receive credit for the HSC 590 course.

At minimum, the syllabus must require that by the end of the course, the student:

- 1. Have chapters 1 and 2 at least ready for full committee review, if not yet final
- 2. Have a draft of Chapter 3 completed (e.g., at least an outline)
- 3. Have a complete IRB application prepared, if relevant

HSC 698: Thesis

Students will request a permit to register in HSC 698 from the Graduate Director. They must have successfully completed HSC 590, obtained approval from the Thesis Chair to continue on the Thesis option, and have met pre-requisites (HSC 500, 503, 570, and 696; and been advanced to candidacy) to receive a permit to register for HSC 698.

The milestones and requirements of the HSC 698 units should be determined through discussion and agreement between the student and Thesis Chair. This may vary depending on when the student enrolls in thesis units.

Appendix K

Thesis Defense Information

Requirements and preparation

- The student must work with their committee to identify the date by when they must provide the full, five-chapter, Chair-approved thesis to all committee members before the defense may be scheduled. This date should not be less than 2 weeks prior to the desired defense date. Once a due date is established, it is the *student's responsibility* to meet the committee-approved deadline for submission of the final thesis. If the student does not meet that deadline, they will need to schedule the defense for a later date, and take full responsibility for any consequences (e.g., delay of graduation date) that result from their failure to meet the deadline.
- Thesis Chair receives approval of the complete thesis from all committee members; approval implies that there are no major issues with the complete product (although there may be edits needed, they would not be considered major issues with methodology, analyses, etc.)
- Student schedules the defense date that works for all committee members to attend
- While the Thesis Defense is expected to be completed in-person, if circumstances require a virtual meeting, this is allowable (committee members may attend virtually, and if warranted all parties may attend virtually)
- Student works with Department Coordinator to secure a location for the thesis defense (if
 not being conducted completely virtually). The student should provide Committee Form #4
 (see Appendix D) to the Department Coordinator to show proof that they are allowed to
 schedule the defense. The room should be reserved for 4 hours (half-hour for setup, up to 3
 hours for defense, half-hour for cleanup)
- The date, time and location information for the thesis defense is sent to committee members and other guests the student wishes to invite (e.g., faculty, peers, friends, family, etc)
- Thesis Chair shares the details of the process that will be followed for the exam portion with the committee and student
- Prior to the defense date, student will prepare and practice the presentation and practice
 responses to potential questions. It is *highly recommended* that this be done with their
 Thesis Chair. Meetings with the Thesis Chair as frequently as necessary are *strongly encouraged* to ensure the student has needed guidance on the development and delivery
 of the presentation, as well as the delivery of sample responses for the oral examination.
- Student is responsible for ensuring they have all materials and equipment needed for the presentation (e.g., laptop, PPT, cables/adapters)
- If desired, the student can request that the Thesis Chair announce the defense to the department
- Note: Students are NOT required or expected to provide food or refreshments

Key Information for the Thesis Defense

It is the responsibility of the student to be familiar with the room in which the defense will take place to ensure the presentation will go smoothly. It is advised that the room reservation begin an hour prior to the defense so that the student can test out all equipment and call classroom support services to address any problems so that the defense can start on time.

The student must ensure all committee members will be present during the defense, therefore reminders are recommended. In the rare case that one committee member does not show up,

the defense can go forward *if and only if* the Thesis Chair and one other committee member are present, and the Department Chair approves this exception. If a committee member needs to join virtually (i.e., via phone, Skype or Zoom), that is acceptable. **If the Thesis Chair does not show up, the defense must be rescheduled**.

The total time for the defense may take up to 3 hours to complete. The thesis defense will commence with a PowerPoint presentation (usually 30-45 minutes, but no more than one hour) that covers all 5 chapters of the thesis. General questions from the audience and committee members can be taken during or after the presentation (the Thesis Chair can decide which is preferred).

The private oral defense exam portion will then commence (this component may take up to 2 hours). During the oral exam, the student will answer a series of exam questions that were developed by the committee members. The purpose of these questions is to assess comprehension and attainment of key learning outcomes, and to provide clarification on the content of the presentation and/or thesis. The exam portion is led by the Chair, who may choose to structure how the questions are asked (i.e., order, who will ask the questions, etc). The Chair should inform all committee members and the student of their preferred structure PRIOR to the defense. After the last question is answered, the student will be temporarily excused. The committee will confer privately on whether or not the student passed the defense and what edits are needed for final approval of submission of the thesis. The possible outcomes are: passed, passed with contingencies (which must be clearly delineated), or fail. In the case that a student fails, they must meet with the Chair to discuss next steps; the defense can only be retaken one time. Students may bring the signature page to the defense in the case that all committee members approve the thesis for submission at the conclusion of the defense (i.e., should the student receive a "pass with no further edits" decision).

After the exam, the student must make any required changes to the thesis document. An appropriate timeline for edits and approval (based on the student's desired semester of graduation) should be delineated with the student by the Thesis Chair and committee and should be based on the University's requirements for graduation as shared by the Thesis Office. Once all committee members have approved the final thesis for submission to the Thesis Office, the signature page can be signed. The student must arrange with each committee member how they will obtain signatures to meet the submission deadline. The student must submit the signature page to the Thesis Office by the University submission deadline.

Recommended Defense Timeline

At least one month before a desired defense date, the student provides the full, Chair-approved thesis to all committee members

BEFORE THE EXAM

- At least 2 weeks before: reserve a room and provide information to committee members
- Two weeks before: send PPT presentation to Chair for review and editing to have final version completed one week before defense
- Week before: Practice the presentation and responses to questions with Chair
- Three days before: ask committee members to confirm their attendance
- Day before: ensure all materials are prepared

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DURING THE EXAM

- Presentation of the thesis (30-45 minutes)
- General questions from the audience (5-15 minutes)
- Student and guests are excused
- Committee meets privately to organize questions and related issues for the exam portion (5-10 minutes)
- Student ONLY meets with the committee for the oral examination (30-90 minutes)
- Student is excused
- Committee meets privately to discuss responses, address any concerns, identify any required edits for the thesis, and whether or not the student passed the exam (5-10 minutes)
- The Chair invites student in to share the results of the oral defense and discuss any required edits, provide feedback, student asks additional questions, etc. (5-20 minutes)
- Defense is concluded

AFTER THE EXAM

- If result is Pass with no edits, attain signatures and submit to Thesis Office
- If result is Pass with contingencies, incorporate required edits, obtain approval, obtain signatures, submit to Thesis Office
- If result is Fail, student must work with their Thesis Chair to prepare a second defense