



**Student Guide to the Traditional Thesis for the MPH and MS
The University of Texas Health Science Center at Houston (UTHealth) School of Public Health
2020**

Office of Academic Affairs and Student Services
Student Research
Email: SPHStudentResearch@uth.tmc.edu

Contents

Introduction	
I. Complete courses required for your thesis	3
II. Enhance your writing skills	4
III. Identify a project (<i>all students</i>) and competencies (<i>MPH students only</i>)	5
IV. Form your thesis committee	8
V. Follow enrollment requirements	8
VI. Prepare your proposal	8
VII. Review and approval of proposal by your committee	10
VIII. Submit proposal for review by Human Subjects, Animal Welfare, or Safety Committee (<i>if applicable</i>)	10
IX. Submit proposal to the Office of Academic Affairs and Student Services	12
X. Complete your proposed thesis work	13
XI. Prepare your final thesis document	13
XII. Present your thesis project	14
XIII. Submit final thesis to the Office of Academic Affairs and Student Services	15
XIV. General timeline of a thesis	15
Student Research	17

Introduction

Master of Public Health (MPH)

All MPH students are required to complete an [integrated learning experience](#) (ILE) as required by the Council on Education for Public Health (CEPH), the accrediting body of the school. This requirement can be fulfilled through successful completion of an approved capstone course, independent ILE project, or a traditional academic thesis.

MPH students that are interested in completing a capstone course or independent ILE project, should refer to the [MPH Integrative Learning Experience \(ILE\) Guide](#) for more information.

Master of Science (MS)

All MS students are required to complete a traditional research thesis as part of their degree program's requirements.

Both the MPH and MS traditional theses must demonstrate public health significance and appropriate depth of knowledge in the field of study. This guide provides an overview of the required steps and resources available to ensure that students in both MPH and MS programs successfully complete the requirements of the traditional academic thesis.

Overview of the steps required to complete the thesis

The thesis requires many steps as outlined below. It's important to begin talking to your adviser early in your graduate program to ensure you are completing the appropriate steps to be successful in completing your thesis.

- I. Complete courses required for your thesis
- II. Enhance your writing skills
- III. Identify a project (*all students*) and competencies (*MPH students only*)
- IV. Form your thesis committee
- V. Follow enrollment requirements
- VI. Prepare your proposal
- VII. Review and approval of proposal by your committee
- VIII. Submit proposal for review by Human Subjects, Animal Welfare, or Safety Committee (*if applicable*)
- IX. Submit proposal to the Office of Academic Affairs and Student Services
- X. Complete your proposed thesis work
- XI. Prepare your final thesis document
- XII. Present your thesis project
- XIII. Submit final thesis to the Office of Academic Affairs and Student Services

I. Complete courses required for your thesis

You should begin to discuss potential thesis topics early in your Master's program so you can plan to take any additional coursework that you may need to obtain the skills necessary to successfully complete your thesis. Students who are proposing complicated quantitative analyses may need more advanced statistical courses or specialized statistical courses in particular areas such as behavioral science. Students conducting qualitative analyses may need advanced qualitative analyses courses, and students accessing large datasets or using insurance datasets may need specialized courses to handle these data. Students should consult with their faculty advisor early in their program.

II. Enhance your writing skills

It is important to ensure that you have, or have a plan to acquire, the writing skills required to complete the thesis, including basic and advanced scientific writing skills.

UTHealth SPH Library & Graduate Communication Center: By adopting a learning commons model, UTHealth SPH is adapting to the ever-changing field of higher education and addressing the skills gap in the field of population health by producing a trained workforce.

The UTHealth SPH Library & Graduate Communication Center in Houston (713-500-9121, RAS E-109) integrates [Library Services and Writing Support Services](#) to provide a full-service learning, research, and project space. To accomplish this goal, it combines the functions of a library, a writing center, and a student lounge in a single community space. This space strives to empower students to direct their own learning by offering them a place where they can meet, talk, study, and use shared equipment and resources.

- ***Library and Information Services:*** The UTHealth SPH Library & Graduate Communication Center provides library and information services including course reserves, library instruction, and reference assistance, i.e., formal training on the use of online searching techniques and reference management software as well as one-on-one training and assistance ([Library Services](#)). Reference assistance includes general assistance as well as in-depth, expert guidance and database search services for grants, research papers, and systematic reviews. To ensure students at regional campuses have equity of services, online research help is provided through LibGuides on various subjects and topics ([SPH Library Services LibGuide](#)), and online reference assistance is readily available through [LibAnswers](#).
- ***Writing Support Services:*** The UTHealth SPH Library & Graduate Communication Center houses [Writing Support Services](#), which provides free writing education to students at all UTHealth SPH campuses (on-site at the Houston campus, and online at the regional campuses). Overall, Writing Support Services aims to help students take responsibility for their own writing by providing them with writing advice, instruction, and support. To accomplish this aim, Writing Support Services develops and delivers resources and services related to public health communication skills, with a focus on writing in the areas of academic writing, ESL, and scientific writing. All these resources and services are tailored to meet students' needs and faculty members' expectations related to writing at the graduate level.

To access a myriad of online writing resources designed for graduate students in the health sciences, students can visit the Writing Support Services LibGuide (<https://go.uth.edu/SPHWritingSupport>). To schedule a writing consultation with a Writing Support Services team member, students can visit the Writing Support Services Appointment Service (<https://go.uth.edu/WSSAppts>). Lastly, for general inquiries, students can e-mail Writing Support Services at SPHWritingHub@uth.tmc.edu.

The Texas Medical Center (TMC) Library: The TMC Library is located in the TMC campus between Baylor College of Medicine and the McGovern Medical School of The University of Texas Health Science Center at Houston.

The TMC Library provides links to a selective and expanding collection of authoritative free and open-access journals, databases, and websites/web applications, as well as to resources in general sciences, education, and reference (<https://library.tmc.edu/resources/>). Students can also participate in classes and workshops on various topics related to library and information services

provided by the TMC Library.

III. Identify a project (*all students*) and competencies (*MPH students only*)

Start thinking about potential topics for your thesis early in your program. Meet with your faculty advisor and other faculty with similar research interests to brainstorm ideas. The project that you select should be of interest to you and relevant to your future career goals. However, it should also be feasible to carry out given available resources and within a reasonable time period. It is very important that you pick a project that fits with your skills (e.g. statistical, qualitative and analytic). Consequently, once you have identified a potential project, it is essential that you discuss both the scientific and practical aspects of the project with your committee members and any others who would play a significant role in the project. Do not be discouraged if your first project idea is determined to be inappropriate, for either scientific or practical reasons. It is not unusual to identify potential projects before an appropriate one is identified. Working through the scientific and practical issues of each potential project provides valuable experience and perspective and is part of the learning process.

MPH Competencies (*MPH students only*)

Once MPH students begin the discussion of project ideas, you should also discuss which MPH foundational and major-specific competencies will be synthesized in your thesis in consultation with your faculty advisor. MPH students must integrate a minimum of two (2) MPH Foundational Competencies and two (2) major-specific competencies into the thesis. MPH students must complete the [MPH Independent ILE Approval Form](#) and submit it to the Office of Academic Affairs and Student Services when you first enroll for PH 9998 Culminating Experience/Thesis credit hours. As you develop and finalize your thesis, it is possible your competencies may change, which is ok. Upon completion of the thesis, students must complete and submit the [MPH Independent ILE Statement of Completion](#), in which they must identify the final competencies synthesized in the thesis.

MPH Foundational Competencies

Choose two [MPH foundational competencies](#) that will be synthesized in your thesis

- MPH-1: Apply epidemiological methods to the breadth of settings and situations in public health practice
- MPH-2: Select quantitative and qualitative data collection methods appropriate for a given public health context
- MPH-3: Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
- MPH-4: Interpret results of data analysis for public health research, policy or practice
- MPH-5: Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
- MPH-6: Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels
- MPH-7: Assess population needs, assets and capacities that affect communities' health
- MPH-8: Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
- MPH-9: Design a population-based policy, program, project or intervention
- MPH-10: Explain basic principles and tools of budget and resource management
- MPH-11: Select methods to evaluate public health programs

- MPH-12: Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
- MPH-13: Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
- MPH-14: Advocate for political, social or economic policies and programs that will improve health in diverse populations
- MPH-15: Evaluate policies for their impact on public health and health equity
- MPH-16: Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
- MPH-17: Apply negotiation and mediation skills to address organizational or community challenges
- MPH-18: Select communication strategies for different audiences and sectors
- MPH-19: Communicate audience-appropriate public health content, both in writing and through oral presentation
- MPH-20: Describe the importance of cultural competence in communicating public health content
- MPH-21: Perform effectively on interprofessional teams
- MPH-22: Apply systems thinking tools to a public health issue

MPH Major-specific Competencies

Choose two [MPH major-specific competencies](#) that will be synthesized in your thesis

Biostatistics Competencies (*MPH Biostatistics students will use the following MS competencies*):

- MS-B1. Use appropriate statistical methods and models to analyze data from the public health, biomedical, or bioinformatics arena.
- MS-B2. Demonstrate the correct use of probability distributions and theory of statistical inference within biostatistics and public health.
- MS-B3. Outline a statistical analysis strategy to appropriately answer a research question.
- MS-B4. Use multiple statistical software packages to analyze data to answer public health research questions.

Environmental Health Competencies:

- MPH-O1. Conduct a risk characterization of an environmental hazard.
- MPH-O2. Critically evaluate information and data in the peer-reviewed literature related to environmental health sciences, considering the quality and suitability of literature and data.
- MPH-O3. Describe regulatory programs, including effectiveness, in the context of legislative authorities that deal with environmental health issues at the local, state, federal, or international levels.
- MPH-O4. Evaluate the function, structure and financing of environmental programs.
- MPH-O5. Demonstrate effective risk communication that incorporates the principles of risk perception.

Epidemiology Competencies:

- MPH-E1. Apply data collection and data management skills for an epidemiologic study.
- MPH-E2. Demonstrate the application of epidemiology for informing etiologic research, public health surveillance, or screening programs.
- MPH-E3. Evaluate a public health problem in terms of magnitude, person, place and time, and exposure-outcome relationships.

- MPH-E4. Apply basic ethical principles pertaining to the collection and management of epidemiologic information.
- MPH-E5. Appropriately interpret measures of disease frequency and association, taking into account the impact of bias and error on results and conclusions.

Health Promotion and Behavioral Sciences

Health Promotion/Health Education Competencies:

- MPH-H1. Conduct a needs assessment in partnership with stakeholders to address a public health issue.
- MPH-H2. Explain how social or behavioral sciences theories are operationalized in health promotion interventions.
- MPH-H3. Apply a systematic planning framework to plan a theory and evidence-based health promotion intervention.
- MPH-H4. Apply a systematic planning framework to plan the adoption and implementation of a health promotion intervention.
- MPH-H5 Describe a plan to evaluate a health promotion intervention.

Health Promotion/Health Education– Dietetic Internship Competencies:

- MPH-DI1. Use the Evidence Analyses Process (EAP) to review a nutrition topic and develop a nutrition focused public health intervention.
- MPH-DI2. Develop a public health nutrition intervention activity based on community nutrition-related needs, assets and capacities.
- MPH-DI3. Communicate patient or client cases using professional nutrition standards.
- MPH-DI4. Demonstrate the ability to conduct nutrition-focused physical assessments.
- MPH-DI5. Implement evidence and theory based nutrition interventions.

Management, Policy and Community Health

Community Health Practice Competencies:

- MPH-C1. Compare and contrast program-planning models used by national public health organizations.
- MPH-C2. Describe the interconnectedness of governmental and non-profit systems in influencing a public health problem.
- MPH-C3. Collaborate with community-based organizations on social justice initiatives to enhance self-reflection when working with diverse communities.
- MPH-C4. Examine the role of leadership in public health practice.
- MPH-C5. Describe the mechanisms and pathways through which economic or social determinants affect health and how these determinants are measured at individual or societal levels.

Healthcare Management Competencies:

- MPH-M1. (TL) Team Leadership: Collaborates with others to complete team-based assignments within healthcare organizations, adapting when needed to maximize organizational and personal success.
- MPH-M2. (SO) Strategic Orientation: Synthesizes organizational opportunities and challenges and defends strategies for organizational success.
- MPH-M3. (AT) Analytical Thinking: Evaluates and analyzes quality, safety and financial performance measures to support managerial decision making in healthcare organizations.
- MPH-M4. (EP) Ethics & Professionalism: Synthesizes knowledge and skills needed to excel professionally with high ethical standards and uses these skills while making a meaningful contribution to the field.

MPH-M5. (OM) Organizational Management: Selects, integrates and evaluates organizational resources to provide high-quality customer-oriented health services responsive to the ever-changing political landscape.

Health Services Organization Competencies:

MPH-S1. Demonstrate understanding of microeconomic theory in a market system and how to apply those concepts to understand the economics of the healthcare system and market failure in the US.

MPH-S2. Review and critically evaluate scientific studies that estimate the effectiveness, efficiency, and equity of health policy alternatives.

MPH-S3. Prepare a detailed policy analysis plan to assess alternative policies for improving the effectiveness, efficiency and equity of health services.

MPH-S4. Describe the internal and external validity strengths and limitations of health policy evaluations and the degree to which results are useful to decision-makers.

MPH-S5. Critically evaluate peer-reviewed published manuscripts in the area of health economics or health services research to identify potential study questions.

IV. Form your thesis committee

The required membership of a Master's student's thesis committee includes:

- the academic advisor
- a faculty representing the student's minor discipline for *MS students only*
- optional members to ensure you have the appropriate expertise to complete your thesis project
- students who have elected a certificate requiring committee representation must include a UHealth SPH faculty member representing the certificate on their committee if not already included

[Policy 104. MPH and MS Committee Structures](#)

MPH and MS Committee Forms:

- [MPH/MS Thesis Supervisor Approval Form](#)
- [MPH Committee Appointment Form](#)

It is the student's responsibility to coordinate meetings with committee members to discuss the proposed topic, to obtain feedback on your proposal, to obtain expert advice and assistance as needed, and to obtain feedback on your final thesis.

V. Follow enrollment requirements

You must be enrolled for at least three credit hours during the semester in which the proposal is submitted, and in every semester after you submit your proposal until you graduate. Failure to enroll may result in expiration of your proposal protocol. Dual degree students may be enrolled in either program to work on their research. [Policy 401, Continuous Enrollment for Students Enrolled in Thesis and Dissertation Research](#)

VI. Prepare your proposal

The proposal is a requirement and serves several purposes. First, the proposal prepares you for the work that will be required to complete your thesis project. As you write your proposal, you are gaining important background knowledge that will help to guide your project, as well as working through the

logistics required to complete each step of the project. The proposal also serves as a contract between you and your committee. It is a statement of the goals that you have agreed need to be met to complete the thesis and move forward towards graduation. Your proposal may also be required to obtain the institutional approvals (e.g. IRB) needed before the project may be initiated.

a. Content of your proposal

- i. **Background/Introduction and Public Health Significance.** This section should provide a review of the relevant literature. The level of detail that you provide in this section will be determined by you and your committee members. At a minimum, you should provide the background information that a general reader would require to understand the topic of your project and the rationale for the proposed work. This section should also include a discussion of the public health significance of your specific project.
- ii. **Specific Aims/Hypotheses/Objectives/Research Questions.** This section should include a statement of the research question, hypothesis, specific aims and / or objectives of your project. The best approach for setting up this section will depend on your specific project and should be discussed with your committee. This section may also include a brief discussion of the rationale for the proposed project and/or a brief description of the approach that will be used to meet the stated goals.
- iii. **Methods.** The content of this section will vary depending on your specific project. However, all proposals must include details of the methods that will be used to address the study aims/hypotheses or objectives. The methods section tells the reader exactly “how” you are going to achieve your aims and/or answer your research questions. It is important to be as specific as possible in this section. The methods section may include the following content, as appropriate to your proposed work:
 - Study design
 - Study setting, including locations and dates
 - Study population
 - Inclusion and exclusion criteria
 - Recruitment strategy
 - Consent process sample size calculations and/or study power
 - Data collection procedures
 - Data handling and record keeping
 - Data analysis
 - Ethical considerations
 - Human subjects, animal subjects, and/or other safety considerations
 - References/Bibliography - This section should include complete references for all literature, websites, books, and other materials referenced in your proposal. You should consult with your committee on citation preference. It is recommended that you use reference management software such as [RefWorks](#).
 - Appendices - may include data collection instruments, mock tables of results, and any additional materials to help the reader understand the details of your project.
- iv. **Format of Proposal.** The length of you proposal varies according to details needed to fully describe your research. UHealth SPH does not require a specific format (margins, font, etc.) for the thesis proposal. In general, double-spaced text with 12-

point font and 1-inch margins is appropriate for the proposal. Page numbers are also recommended. Check with your committee to determine formatting preferences including their recommendations on citation styles. The content of your proposal may vary according to the needs of the research. Check with your committee for guidance on content and formatting requirements. Template examples can be found at <https://uthealthsph.force.com/UTHealthCommunity/s/studentresearch>. Although there are no specific guidelines, the final product must form, so you should consider this when drafting your proposal.

VII. Review and approval of proposal by your committee

Preparation of your proposal is an interactive process that involves your committee members. As you begin your proposal, you should work with your committee members to establish how they will review drafts of your proposal. Often, one member of your committee will serve as a primary reviewer for your initial draft(s), while the other members will review only later drafts or specific sections of the proposal. In general, your proposal will require several drafts and edits before it is finalized. It is reasonable to assume that, on average, it will take two to three weeks for committee members to provide feedback on each of your drafts and that two to four drafts will be required before the proposal is finalized. Your proposal must be approved by all thesis committee members.

VIII. Submit proposal for review by Human Subjects, Animal Welfare, or Safety Committee, if applicable

Your proposal may need to be submitted to and approved by an institutional review committee if your project involves human subjects research, animal research, or agents (chemical, biological, or radiological) that require approval.

All research conducted by the faculty, students and staff of UTHealth SPH including research projects and analyses of research data that are conducted as part of UTHealth SPH courses, must be reviewed and approved or exempted by the appropriate institutional committees before the research is initiated. At the University of Texas Health Science Center (UTHealth), these committees, which fall under the UTHealth Office of Research, monitor research compliance related to: Human Subjects Protection, Care and Use of Animals, and Environmental Health and Safety.

UTHealth Office of Research: <https://www.uth.edu/research/index.htm>

It is the responsibility of the investigator (or course instructor) to ensure that a research project has received all necessary approvals prior to initiating a study, and to require all project staff and/or students to receive appropriate training before initiating any research related activities. It is also the investigator's responsibility to obtain approval for any additions or changes to the study, before they are implemented, as well as to maintain all necessary approvals through completion of the study.

This document provides UTHealth SPH investigators with general information regarding the Institutional training that is available, and the oversight that is required for different types of research. In addition, general questions regarding training and oversight may be directed to the Office of Student Research at SPHStudentResearch@uth.tmc.edu. However, investigators should visit the appropriate UTHealth website for the most up-to-date and complete information, and/or contact the appropriate programmatic official in the UTHealth Office of Research, to ensure that they have obtained all necessary training and approvals before initiating any research project.

Human Subjects Protection

Committee for the Protection of Human Subjects (CPHS)

CPHS is the Institutional Review Board (IRB) for UTHealth. CPHS reviews proposed research as it applies to the individuals being asked to participate as research subjects in order to determine if adequate measures are in place to protect autonomy, safety, emotional health, and financial considerations.

Human subjects research is defined as research involving human subjects, human-derived materials, or human-derived data. All human subjects research, funded and unfunded, must be reviewed and approved by CPHS before it is initiated if it falls in one of the following categories:

1. Human subjects research conducted by any UTHealth employee (faculty, staff, administrative and professional), student, or resident in any facility/location (e.g. MHHS, HCPC, Thomas Street Clinic or LBJ General Hospital);
2. Human subjects research conducted by non-UTHealth investigators that involves subjects/patients from any UTHealth-facility.

CPHS: <https://www.uth.edu/cphs/>

Most of the research conducted by UTHealth SPH investigators will require review by CPHS. Examples of research that **does not** require CPHS review include:

Research Using Simulated Data: Research based solely on data obtained through computer simulations does not require CPHS review.

Research Using Published Literature: Research that is based entirely on published literature (e.g. systematic literature reviews) does not require CPHS review.

Exempt Status: Many research projects are exempt from CPHS review. However, the investigator **cannot** make the decision regarding exempt status. Studies that may be exempt must be submitted for review and determination of exempt status by CPHS. Examples of types of research that may qualify for exemption include:

Research Using Publicly Available Data: Research involving publicly available data (e.g. census data, labor statistics, data available online) must be submitted to CPHS in iRIS for determination of Exemption. Investigators should contact the CPHS at 713-500-7943 if they are not sure whether their data qualifies as “publicly available.”

Research Using Existing, De-identified Data: Research involving the use of existing, de-identified data sets must submit an application to CPHS in iRIS for determination of Exemption.

Expedited Review: Research involving existing data sets with the use of personal identifiers must be submitted for review by CPHS in iRIS. These studies may qualify for Expedited Review by CPHS.

Human Subjects training: All individuals participating in research that involves human subjects must receive appropriate training before initiating any research activities, and must receive updated training as necessary.

Courses that satisfy the UTHealth requirement for education on the protection of human subjects are offered online by the Collaborative Institutional Training Initiative (CITI).

Information about CITI: <https://www.uth.edu/cphs/for-researchers/training.htm>

Link to CITI: <https://www.citiprogram.org/default.asp?language=english>

In addition to the above requirement, all principal investigators of sponsored projects must complete an online Investigator Briefing in the Responsible Conduct of Research. Further details on this requirement can be found at: <https://www.uth.edu/evpara/investigator-briefing.htm>

Applications: UT CPHS uses an online application called iRIS (Integrated Research Information System). All applications, including those for studies that may be exempt from CPHS review, must be submitted through iRIS.

Register for iRIS training: <https://www.uth.edu/cphs/for-researchers/basic-iris.htm>
Log in to iRIS: <https://iris.uth.tmc.edu/>

Care and Use of Animals

Center for Laboratory Animal Medicine and Care (CLAMC)

The CLAMC provides training related to the oversight, care and use of experimental animals, to ensure that the individuals involved in these activities are qualified to accomplish these tasks in a humane and scientifically acceptable manner.

Animal Welfare Committee (AWC)

All research using animal subjects or animal derived materials must be submitted to the AWC, the Institutional Animal Care and Use Committee, for the UTHealth. Faculty with approved animal use protocols must assure the AWC that personnel will be or are adequately trained. Training is provided through CLAMC.

<https://www.uth.edu/animal-research/>

Environmental Health and Safety

Safety, Health, Environment & Risk Management's (SHERM) mission is to work in conjunction with the UTHealth community to ensure that education, research, and health care service activities take place in conditions that are optimally safe and healthy for all students, faculty, staff, visitors, surrounding community and the general public.

Training in basic laboratory safety as well as radiation, chemical and biosafety is provided by SHERM.

Additional information about SHERM committees as well as application materials can be obtained at: <http://www.uth.edu/safety/>

IX. Submit proposal to the Office of Academic Affairs and Student Services

Once the thesis proposal is final, it should be submitted to the Office of Academic Affairs and Student Services for final approval no later than the last day of class of the term prior to which they expect to graduate. [Policy 109, Student Research Thesis/Dissertation Proposal Approval](#)

Information about how to submit for approval

Proposal forms, along with detailed instructions for submitting the proposal to CPHS and to the Office of Academic Affairs and Student Services are available at: <https://uthealthsph.force.com/UTHealthCommunity/s/studentresearch>

All thesis proposals will require the following forms/documentation:

- Student Proposal Cover Sheet
- Institutional Approvals Document
- [Policy 106, Thesis/Dissertation Data & Publication Authorship](#)
 - [Data Handling Procedures and Publication Plan](#)
- Certificate of student's completion of a course on the protection of human subjects through the Collaborative Institutional Training Initiative (CITI): <https://www.citiprogram.org/>
- Additional forms or documentation may be required (as applicable), such as:
 - Data Handling Procedures (for use of existing data/samples)
 - Letter of permission for use of data (for use of existing data not in the public domain)
 - Letter documenting that the student has been added as personnel on an existing UTHealth faculty member's study, which has been approved through U T Committee for the Protection of Human Subjects (CPHS UT CPHS letter of approval (or exemption letter) for the student's thesis research (student is PI). Students who require CPHS approval for their project should review the CPHS protocol requirements to ensure that they include all relevant detail in their SPH proposal.
 - UTHealth Animal Welfare Committee documentation (projects using animals)
 - UTHealth Institutional Biosafety/Chemical Safety Committees (as appropriate)
 - Certificate(s) of completion from appropriate institutional safety courses (e.g. animals; biohazardous substances, chemical, radioactive materials; microbiological, biological, infectious agents or recombinant DNA)

Approval by the Office of Academic Affairs and Student Services requires that all required documents have been submitted and are complete and accurate. If your project requires CPHS or other approvals, and such approvals are pending, you may submit all other documents for preliminary review. However, final approval will require appropriate documentation from all relevant committees.

X. Complete your proposed thesis work

The requirements for this step vary considerably from project to project. While the thesis proposal provides an outline of the work that needs to be accomplished, the student and committee members must work together to determine the details of how and when that work will be accomplished. The successful and timely completion of any project requires communication, organization and time management. Hence, it is essential that you meet with your committee members to develop a work plan and timeline. Issues that should be addressed during this meeting include: the role of each committee member, how often you will meet with committee members, mechanism(s) for providing updates between meetings e.g. emails, summary reports etc.

As you are working on your project, it is important to adjust your work plan and timeline so that they remain realistic. If your work plan changes substantially, relative to what was included in your approved proposal, it may be necessary to submit a proposal amendment memo as well as protocol amendments to your committee as well as other relevant committees (e.g. CPHS).

TIMELINE: In general, it can take 1-6 months to complete a thesis after all approvals have been received.

XI. Prepare your final thesis document

The thesis proposal will provide the starting point for your final thesis document. However, you may need to update the Background section to reflect any new developments in the field. In addition, you

may need to expand and/or revise the Methods section to accurately reflect the procedures that were used. You will also need to write the sections that were not included in your proposal (e.g. Results and Discussion) and update your references.

The final thesis document can have one of two general formats: Thesis without journal article
Thesis with journal article(s).

Templates and a Template Checklist to be used for formatting are available at:
<https://uthealthsph.force.com/UTHealthCommunity/s/studentresearch>

The templates are designed to assure that standards of style and document formatting (margins, page numbering, style, etc.) are followed. They are not intended to define the specific content of the thesis. Use of the templates is optional for the proposal; however, they must be consulted for the appropriate formatting of the final thesis document. Use of the Template Checklist (see link above) is required when formatting your thesis in a program other than Word (i.e., LaTeX).

What should the final thesis document include?

There is considerable flexibility in the manner in which you present your thesis. In general, the final document will include the following sections:

- Abstract. The abstract is a concise summary (~350 words) of the background, methods, primary results and conclusions of your thesis
- Background/Introduction and Public Health Significance
- Specific Aims/Hypotheses/Objectives
- Methods
- Results. This section should describe your findings or accomplishments, without comment or discussion. Findings may be presented in tables and figures as well as text. If the project has been, or will be submitted for publication, the journal article (conforming to the style of the journal to which it has been/will be submitted) may be included as a chapter within the results section. Any additional findings, not included in the article, should be included as a separate chapter in the results section.
- Discussion/Conclusions/Recommendations. In this section, the results of your project should be discussed relative to what is already known about the topic. In addition, the conclusions and/or recommendations that can be made based on the results of the project should be stated. Finally, the strengths and limitations of the project should be described.
- References/Bibliography

The final thesis must be approved and signed by all student advisory committee members.

XII. Present your thesis project

Successful completion of the thesis includes a public presentation. This presentation may be based on either the proposal or on the completed project. The decision as to when to conduct the oral presentation is determined by the student and the advisory committee. Presenting the project at the proposal stage has the advantage of allowing for input from individuals outside of your committee, which may be helpful as you move forward with your project, and can help to reduce your workload as you approach graduation.

Although there is not a specific format for the public presentation, it is suggested that you use a standard software package (e.g. PowerPoint) to develop your talk. You should provide drafts of your slides to your committee, and practice your talk at least once with your committee members. Additional

practice sessions with other students or colleagues can also be helpful. You should be able to present your work without, or with minimal reference, to written notes and be prepared to answer questions from the audience. It is also important that you are able to go through your entire presentation in the allotted time.

Setting up the presentation: The time and venue for the presentation are determined by the student’s advisory committee. Options include presentation as part of a school or department-wide seminar or an individually scheduled public presentation. This requirement is best completed at least two weeks prior to the last day of class in the semester that the student plans to graduate.

Houston campus students can schedule a room for the presentation by completing and submitting a room reservation request through the [Astra](#) online reservation system. Austin, Brownsville, Dallas, El Paso, and San Antonio Campus students should contact their campus staff advisor to schedule a room. Presentations must be announced to the public at least two weeks before the last class day; for example, by distributing flyers, or announcing it in the SPH weekly newsletter by forwarding your presentation information (your name, thesis title, location, date and time, and committee names) to: sphannounce@uth.tmc.edu. The final deadline for completion is no later than the last class day.

XIII. Submit final thesis to the Office of Academic Affairs and Student Services

Once the thesis is final, it should be submitted to the Office of Academic Affairs and Student Services for final approval. All forms along with detailed instructions for submitting to the Office of Academic Affairs and Student Services are available at:

<https://uthealthsph.force.com/UTHealthCommunity/s/studentresearch>

MPH Students: You must submit the [MPH Independent ILE Statement of Completion](#) form when you submit your final thesis. If the competencies attained and synthesized in the thesis changed from those originally indicated in the MPH Independent ILE Approval Form as you developed and completed your thesis, the final competencies must be indicated in the completion form.

XIV. General timeline of a thesis

The amount of time required to complete the thesis is determined by the specific project and the time that the student devotes to the project. In general, this process can require at least six and up to 16 months.

Activity	Timeline
Selection of a project Discussion of ideas with committee members Approval of concept by all committee members	1-3 months
Preparation/committee approval of the proposal Draft proposal Review of proposal by committee members Revision of proposal (several revisions may be necessary) Committee approval	1-3 months
Other institutional review and approvals of proposal (if required)	2-6 weeks*
Office of Academic Affairs and Student Services approval	2 weeks
Conduct the project data collection, data management, and analysis	1-6 months

Preparation/committee approval of the final thesis document Update background, methods, bibliography as needed Write results and discussion Prepare figures and tables Submit to committee members Review by committee members Revisions as necessary (several may be required) Committee approval	1-2 months
Total	6-16 months

*Proposals requiring full IRB review may take longer.

Student Research

Students as Personnel on UTHHealth Faculty Research Projects: Many UTHHealth SPH students participate as personnel in research being conducted by UTHHealth SPH or UTHHealth SPH faculty members. A student's involvement in such projects must be approved by all appropriate committees (CPHS, AWC, IBC, etc.). In general, students can be added as personnel to an existing approved protocol by submitting a change request to the appropriate committee.

Classroom Projects: Instructors who wish to include a research project or analysis of existing data as part of a course (e.g. to explore statistical methods or other methodological issues, etc.) should obtain CPHS approval for the class project. In general, applications for class projects involving contact with or analysis of data from human subjects should be submitted to CPHS (through iRIS) by the course instructor. Briefly, the application should include: the class objectives; the types of research activities that will be included in the course; a description of faculty oversight for the project; and an acknowledgement that any student activities that exceed the boundaries of the class would need to be submitted as individual projects (e.g. if a student wants to expand upon a classroom project, for instance, for use as a culminating experience). Students who wish to expand on a class project should contact CPHS to determine whether additional approvals will be required for their project. Questions regarding classroom projects should be directed to the Committee for the Protection of Human Subjects (CPHS), at: <https://www.uth.edu/cphs/contact-cphs.htm>.

Student Research: Many UTHHealth SPH students will engage in an independent research project as part of their academic program. As with all UTHHealth SPH research projects, student projects must be reviewed by the appropriate Institutional committees before the research is initiated.

The IRB approval process for student projects is generally identical to that of faculty projects. However, for students who plan to undertake a project that falls within the scope of, or is closely-related to, an existing UTHHealth faculty member's CPHS-approved protocol, it may be possible for the study PI to obtain IRB approval of the student's project by submitting a personnel change request/protocol amendment to the existing, approved protocol in iRIS. Similarly, students may already be listed as personnel on the UTHHealth faculty member's study in question. In this case, the approval letter for the existing protocol or approval of an amendment to the existing protocol, can serve as the student's CPHS approval for the thesis project, as long as all of the work to be undertaken for the thesis is covered within the approved protocol.

Alternately, students needing IRB approval for their thesis who have not been added to a UTHHealth faculty member's approved protocol in iRIS must obtain CPHS approval by submitting their own application to CPHS in iRIS. All student thesis projects needing IRB approval *must always* receive approval through the UTHHealth CPHS, either by being added to an existing protocol with CPHS approval (as above), or by submitting an application for the student's own project in iRIS. When necessary, approval through another institution's IRB (i.e., Baylor, MDACC, etc.), should be obtained as well. Outside IRB approval may be required in addition to, but never in place of, the UTHHealth CPHS approval/exemption.

Students undertaking a thesis project must complete all required training and obtain all necessary committee approvals before their project will be approved by the Office of Academic Affairs and Student Services. It is the responsibility of the student and his/her research committee to determine which approvals are required, and to apply for, obtain and maintain all such approvals. Students should visit the appropriate UTHHealth website for the most current and complete information (see above), and/or contact the appropriate program official at UTHHealth to ensure they have obtained the appropriate training and approvals needed before initiating their project.

Students should visit the UTHealth SPH Student Research pages at: <https://uthealthsph.force.com/UTHealthCommunity/s/studentresearch> for detailed instructions on submitting the student thesis proposal to the Office of Academic Affairs and Student Services, and to the UTHealth CPHS in iRIS. For assistance, please send an email to SPHStudentResearch@uth.tmc.edu.