

*University of Washington*

Department of Global Health

# Master's Thesis Handbook

“The point of a thesis or paper is to coherently communicate the essence of your study. Irrelevant information is distracting and confusing; it may obscure your central idea and logic. Be brief; don’t include discussion that doesn’t relate to your question. A quality thesis is short and concise.” - Stephen Gloyd, Associate Chair, Department of Global Health

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## I. OVERVIEW OF GLOBAL HEALTH THESIS PROCESS

This document presents thesis guidelines for students in the Department of Global Health's General and PCMI Tracks. Epidemiology Global Health Track students should also refer to the Department of Epidemiology's guidelines and requirements. The following will be covered in this document:

the process of developing a thesis topic for either a research or practice thesis, forming a thesis committee, applying for Human Subjects approval or exemption, writing the thesis manuscript, and turning in the completed thesis.

The Global Health MPH thesis is an individualized opportunity to apply and extend the student's public health skills, develop new competencies, expand professional networks, and gain specialized knowledge in an area of the student's interest that can be used to advance the student's future career and effectiveness in the public health arena. The master's thesis is an original work that is carried out using rigorous methods and that generates new knowledge, applies concepts and methods from one or more branches of science relevant to public health, and is presented in a scholarly format. The thesis demonstrates the student's comprehensive knowledge of the substantive research or practice area and the methods used. The thesis is a learning experience, designed to challenge the student at her/his skill level, while adhering to a standard of high quality regarding the questions posed, the methods used, and the written product. The thesis also allows the student to demonstrate mastery of several of the competencies specified for the MPH program. The thesis must integrate aspects of global health that impact developing country populations; most students conduct their thesis work in a developing country setting.

The development of the thesis - from early conceptualization to completion - is a lengthy process. It is beneficial for students to begin thinking about potential thesis topics from day one. This allows students to take full advantage of the resources and assignments of subsequent courses (i.e. Research Methods in Developing Countries, Qualitative Methods and Health Services Research), can provide context and thesis-specific relevance to classes, and allows for constructive feedback from professors. The student is guided in thesis planning by his/her faculty advisor and others; as the topic becomes clearer the student needs to identify a Thesis Chair who will provide the main guidance needed for the process. The thesis advisor (also called the Thesis Chair), along with at least one additional committee member, provides guidance and final determination regarding acceptability of the quality of the final product.

In addition to completion and submission of the thesis, students are required to give a short oral presentation of their thesis work (ten minutes plus five minutes for questions). Students may not graduate with their MPH degree until the thesis has been submitted and presented.

## A. Research Thesis versus Practice Thesis

Students are expected to produce independent, scholarly work and create new knowledge through either a research or a practice theses. The distinction between “research” and “practice” is not always clear; elements of practice are often embedded in a research thesis and research methods may be used in a practice thesis. Conceptually the difference is based on a number of elements of the activity, central of which is the question as to the main purpose and intent of the activity. Research is conducted with the intention of discovering new, generalizable knowledge; this is the main intent of a research thesis. The practice thesis, on the other hand, is meant to address a very specific public health practice issue in a specific setting, with the primary intention of supporting improvements in health or health care in that setting.

The conceptual frameworks and methods for these two thesis types differ somewhat, and are described more fully below. Practice theses tend to rely more on planning models and qualitative research methods, while research theses may test hypotheses or research questions and more frequently use quantitative methods. Practice theses are more likely to generate hypotheses, while research theses are more likely to involve hypothesis testing. Practice theses may explore questions in advance of designing an intervention or produce materials using formative research methods such as individual or group assessment, health planning or instructional design frameworks, and testing. Many of the steps are similar for a research or practice thesis. Both must demonstrate clarity of purpose, test assumptions, discuss results, and evaluate the limitations of their work. An additional measure that relates primarily to the quality of a practice thesis is how effectively it contributes to the goals and objectives of the agency or organization where it was conducted. The approaches and outcomes of each may differ, but a high level of effort and standards for performance are required for both types of thesis. A measure of quality of both research and practice theses relates to the clarity of thought process, beginning with the statement of the question or problem, to final statement of conclusions or recommendations.

Comparison below of public health research and practice theses illustrates equivalency in the research process and quality assessment:

Research Thesis	Practice Thesis
<u>Introduction</u> <ul style="list-style-type: none"> <li>• Statement of study question(s)</li> <li>• Literature review</li> <li>• Importance and rationale</li> <li>• Conceptual framework</li> </ul>	<u>Introduction</u> <ul style="list-style-type: none"> <li>• Statement of problem</li> <li>• Literature review or evidence to support need</li> <li>• Rationale for approach</li> <li>• Conceptual framework or project planning brief</li> </ul>
<u>Methods</u> <ul style="list-style-type: none"> <li>• Framework/design for analytic hypothesis</li> </ul>	<u>Methods</u> <ul style="list-style-type: none"> <li>• Description of assessment methods and</li> </ul>

testing or descriptive studies <ul style="list-style-type: none"> <li>• Setting (describe potential interventions, if appropriate)</li> <li>• Data sources             <ul style="list-style-type: none"> <li>○ Study subjects/population</li> <li>○ Study indicators</li> <li>○ Data collection procedures</li> </ul> </li> <li>• Analysis technique(s)</li> </ul>	alternative approaches to problem <ul style="list-style-type: none"> <li>• Setting (problem specific vs. broad organization and community)</li> <li>• Data available/to be collected, with definitions of measures</li> <li>• Process for analysis of data &amp; use of new information</li> <li>• In some cases, prototype development and testing</li> </ul>
<u>Presentation of Results</u> <ul style="list-style-type: none"> <li>• Quantitative or qualitative results of study</li> </ul>	<u>Description of Results and Findings</u> <ul style="list-style-type: none"> <li>• Product of the thesis activity (e.g., product-testable model, detailed training plan, blueprint, educational product, evaluation report, case study, software, media, etc.)</li> <li>• Qualitative results of study (if applicable)</li> </ul>
<u>Discussion/Conclusions</u> <ul style="list-style-type: none"> <li>• Recommendations</li> <li>• Limitations</li> </ul>	<u>Discussion/Recommendations</u> <ul style="list-style-type: none"> <li>• Actions taking, findings</li> <li>• Describing solutions to problem</li> <li>• Critical evaluation of the project in meeting its goals</li> </ul>
<u>Appendices</u> <ul style="list-style-type: none"> <li>• Typically research tools</li> </ul>	<u>Appendices</u> <ul style="list-style-type: none"> <li>• Typically an attached product</li> </ul>

## B. Selecting a Thesis Topic

After active discussions with faculty advisors, other faculty members, students, and external agencies that might host the student for the thesis, students should aim to settle on a well-defined thesis topic by the end of the second quarter of coursework. As a beginning step, it may be helpful to develop a few well-focused potential research questions. It is important to identify a topic that is of real interest, as the thesis process is long and requires sustained effort. It is also important that the thesis project be one that can be feasibly undertaken within the existing time frame; students who plan to do thesis work in an international setting should begin planning especially early as logistical problems and IRB delays may arise.

Students may also want to think strategically about how a thesis can position them as “experts” on a topic that improves career prospects, or in relationship to an organization in which they have long term interest. When meeting with faculty members in the student’s general area of interest, it is a good idea to use the opportunity to discuss projects of the faculty member that might offer access to previously collected data, to get additional names of people working in the area, and to request feedback about

possible research questions and study designs. The Health Services and Epidemiology websites contain pages that list student theses back to 1989; the Health Sciences Library has copies of all MPH theses that may be examined in the library. Theses of former Global Health students are available from GH staff.

## II. MPH RESEARCH THESIS

### A. Description and Examples

The primary aim of a research thesis is the generation of generalizable new knowledge. The methods used may be quantitative or qualitative, or a mixture of both. The thesis involves posing a research question based on the current state of knowledge (or lack of knowledge) about an issue, reviewing the literature on that problem which may inform a revision of the question, developing hypotheses or study questions, planning a research design (usually a data analysis approach) to confirm or refute the hypothesis, collecting data or acquiring a data set or answering the study questions, conducting data analysis, presenting the results of the analysis, and discussing the results by carefully considering the strengths and weaknesses of the design, relating the results to previous evidence, and commenting on the implications of the work. Examples of acceptable research thesis topics include:

- **Analytic study:** a case control or cohort study, although other approaches may fit into this category. Analytic studies utilize quantitative methods, and are often guided by hypotheses. Analytic studies conducted by master's students typically use existing data.
- **Descriptive study:** a qualitative or quantitative study to measure magnitude, variability of a need or problem and to explore associated factors. Descriptive studies are often guided by questions rather than formal hypotheses, and are often the first step in more directed research.
- **Experiment:** a study with randomized or otherwise highly controlled allocation of two or more identifiable intervention strategies to test a hypothesis, frequently one regarding causation or treatment effectiveness/ efficacy. The experiment most explicitly addresses the study question, results are clearly relevant, and can be communicated in a straightforward way. Feasibility of conducting an experiment is usually limited within the time frame and resources available to the master's student, given that the student must take significant initiative in study design and execution.
- **Policy Analyses and Case Studies:** described below in the section on practice theses, can also serve as research theses.

### B. Thesis Content and Organization

While the research thesis is typically organized as, and is of similar length to, a manuscript that would be submitted to a journal for publication, the specific formatting of the document must follow the rules set forth by the Graduate School (see "Thesis Format" section below). Otherwise, the decisions about acceptable thesis content and organization reside with each student's thesis committee. While it is not required that thesis research be published, it is strongly recommended that it meet the requirements

for publication in a suitable journal, typically around 20-30 double-spaced pages. Students should recognize the value of publication to the field and to the University.

General content and organization should be as follows for the research thesis option:

### 1. Introduction

Briefly introduce the problem, research aims/questions, previous research on the problem, and the conceptual approach used in this study.

- a. Specification of the problem; significance, magnitude, and importance of the problem
- b. Specific research questions or hypotheses addressed by the study
- c. Literature review
- d. Conceptual model

### 2. Methods

Describes in detail the research methods used in the study.

- a. Study setting (dates and location)
- b. Selection of study subjects
  - i) Source
  - ii) Sampling method/recruitment/sample size
  - iii) Criteria for eligibility/exclusion of cases
- c. Description of intervention (if any)
- d. Data collection
  - i) Source (e.g., questionnaire, interview, record review, vital records)
  - ii) Protocol for typical subject (e.g. informed consent)
  - iii) Steps taken to assess and assure data quality (Measures of association and statistical analysis)
- e. Analysis plan
  - i) Hypothesis testing/generation
  - ii) Definition of key analysis variables
  - iii) Sample size/power considerations
  - iv) Statistical methods

### 3. Results

Provides a clear, systematic presentation of results, linked back to the research questions and conceptual model. It does not include interpretation or discussion of results.

- a. Characteristics of the study sample, including the number of subjects and the response rate.
- b. Table(s) or figure(s) addressing each research question. Tables, figures and graphs usually progress from univariate, to bivariate, to multivariate analyses. Text highlights (but does not duplicate) results shown in tables and figures.

#### 4. Discussion

Provides the opportunity to discuss the findings, compare them with previous research, and consider the implications of the findings.

- a. Summary of important results
- b. Study strengths and limitations
- c. How key findings compare or contrast with previous work
- d. Implications of findings (and generalizability)
  - i) For the theory or conceptual model described in the Introduction.
  - ii) For public health practitioners or clinicians
  - iii) For future research

#### 5. Appendices

Contain detailed materials related to the thesis, such as cover letters to respondents, instructions for computing a scale score from the raw data, documentation of the mathematical equations used in the data analysis, example of survey/interview tools, and so forth.

### III. MPH PRACTICE THESIS

#### A. Description and Examples

The SPH *Academic Affairs Handbook* (2008-2009) defines Academic Public Health Practice as the "applied interdisciplinary pursuit of scholarship in the field of public health." This definition describes work that can be done to fulfill the thesis requirement for the MPH. Several different types of projects can be conducted for a practice thesis, such as case studies, policy analyses, and program assessments or evaluations. In most cases the work will be conducted in collaboration with or on behalf of an organization, agency, or community that will benefit from it. Each type of thesis requires a slightly different approach to formulating problem statements, collecting and analyzing data, and discussing results. Regardless of the type of study chosen, the student investigator must apply critical thought, systematic analysis, and clear presentation.

- **Case study:** a detailed review of a unique or important program that captures the background, process, outcomes, successes, failures and lessons learned. The case study may include either qualitative or quantitative data or both. The case study provides an opportunity to explore a single program in depth. Case studies typically have limited generalizability.
- **Policy analysis:** a synthesis of existing and newly collected data brought together in an organized, structured and thoughtful manner to answer a policy question or present and evaluate policy the strengths and weaknesses of options for decision makers. A policy analysis usually employs multiple sources and types of information (e.g., literature, documents, interviews, secondary data).



- **Program evaluation:** structured assessment of the effectiveness of a program, intervention or technique at accomplishing its objectives or outcomes or of the successfulness of its implementation. A program evaluation addresses explicit questions, and the methods and measurement may be complex.
- **Public health survey or needs assessment:** the systematic collection of information from a community or population for the purpose of informing specific programmatic or policy decisions. This type of project entails survey design, data collection, and data analysis.
- **Designing training programs:** development of curricula, training materials, implementation plan, and/or evaluation plan for training public health workers or members of the public concerning a public health issue or priority.

Practice theses are expected to have results that are directly relevant to the agency within which the thesis work was conducted. For example, an evaluation of a program activity could result in confirmation of how the program is being carried out or might provide a set of recommendations that could significantly influence future program direction. A project involving the use of descriptive information and statistical evidence could provide an analysis on which to base significant public policy determinations. In both instances, the project could contribute significantly to the agency's mission and be appropriate as a scholarly effort to be presented in the format of a professional and/or scientific journal.

**Some types of projects are not acceptable as theses:**

- A literature review alone is not acceptable for a thesis. However a synthesis of a body of knowledge – which includes a literature review as well as the collection of additional data (e.g. secondary data) – in order to inform a programmatic or policy decision, could be an acceptable thesis.
- A group project cannot be used as a thesis. However, the thesis may be part of a collaborative project, provided the student plays the lead role in that part (conducting original work).
- A slightly expanded class or practicum project is not an acceptable thesis, although the thesis can be a significant expansion of work that began as a class paper, project or practicum.

## B. Thesis Content and Organization

The final manuscripts for practice theses may vary considerably according to the type of project conducted and the advice of the Thesis Chair. However, in general, they should be approximately 15 to 25 double-spaced pages and contain the following elements:

### 1. Abstract

Maximum length: 300 words. Should have the following five titled subsections: *Specific Aims; Setting; Methods (or Intervention); Results; Conclusions.*

### 2. Introduction

- a. Specific Aims—What are the specific objectives of the project? With what organization, agency, or community is it being conducted in collaboration? Who will benefit from it?
- b. Problem statement—What is the significance, magnitude, and importance of the problem?
- c. A review of scientific knowledge, evidence, and experience and justification of motivation for the approach taken.
- d. Local Background—Historical, demographic, epidemiologic, economic, social, political, and organizational context in which this project is being conducted.

### 3. **Methods**

Describes in detail the research methods used in the study.

- a. Description of the approach and steps used to achieve the project aims
- b. Description of any data analysis used to achieve the project aims
- c. Selection of population (if appropriate)
  - i) Source of information
  - ii) Sampling method/recruitment
  - iii) Criteria for eligibility/exclusion of cases
- d. Data collection
  - i) Source (e.g., questionnaire, interview, record review, vital records)
  - ii) Measures used
- e. Data analysis

### 4. **Project Results**

What was accomplished? This will generally be a description or summary of the products or activities produced. If the accomplishments involve the creation of a long document or lengthy materials (such as a curriculum, plan, or video), they may be included as an appendix in the report.

### 5. **Discussion**

Provides the opportunity to discuss the findings, compare them with previous research, and consider the implications of the findings.

- a. A review of key activities or findings
- b. How does this experience compare or contrast with others (e.g., from the literature)?
  - i) For the community
  - ii) For public health practitioners generally

### 6. **Recommendations**

What do you suggest might be done as follow up to your work? This section best done in collaboration with those in the agency with whom you worked.

### 7. **References (in a standard format)**

## 8. Bibliography

# IV. GUIDELINES FOR THE PROCESS

## A. Forming a Master's Committee

Once the student and the thesis advisor have agreed on one or a few topics and well-focused research questions, the next step is to organize the thesis committee. The committee should be finalized by early Spring quarter, and no later than the end of Spring quarter, in the first year of study.

The choice of committee Chair (also called thesis advisor) and committee member/s is the student's. However, the thesis advisor typically will advise the student on possible committee members who can provide expertise on some aspect of the thesis, such as the topic itself or the geographic area in which it is set.

The first year faculty advisor may become the Chair, or be on the committee, if appropriate. However, it is not expected that the first year advisor will become the thesis advisor/Chair; the selection is made based on the needs and interests of the student and the thesis topic.

When choosing a thesis committee:

1. The committee Chair must be a member of the Graduate Faculty. Graduate Faculty is a university-wide designation that indicates that the faculty member is entitled to chair thesis committees. See <http://www.grad.washington.edu/gradfac/> to see if an individual faculty member has Graduate Faculty status.
2. The committee Chair must have an appointment in one of the following Departments: Global Health, Health Services, or Epidemiology. The appointment can be primary, secondary, adjunct, or clinical.
3. The second committee member must be a UW faculty member. If the Chair does not have an appointment in the Department of Global Health, the second committee member must.
4. On a three or four member committee, the third or fourth member can be from outside the UW entirely. This is an opportunity to recognize non-faculty/international collaborators for their contributions.

## B. Roles and Responsibilities of Committee and Student

**Note: It is important there be ongoing communication between student and their faculty advisor/Thesis Chair throughout the thesis process!**

**Chair:** The Thesis Chair has the overall responsibility for guiding the student through the process of the successful completion of a thesis which fulfills the requirements of the Graduate School, the School of Public Health, and the Department of Global Health.

More specifically, the Chair's roles and responsibilities are to:

- Guide student's expectations about what can be done within the time constraints of their program.
- Assess the student's ability to carry out all parts of the proposed thesis project and, if gaps are identified, advise the student on how to gain the skills necessary for completion of the thesis project.
- Help the student identify an appropriate second faculty member for the thesis committee, if assistance is necessary.
- Help the student negotiate with outside entities (e.g., public agencies, community organizations) for thesis opportunities. This assistance may include facilitating access to data or providing an opportunity to collect primary data.
- Help the student set up a timeline for completion of the various thesis key milestones such as chapters of the thesis and the oral presentation.
- Make sure all committee members have read and approved the written thesis "proposal" (see p. 12) early in the thesis process. The Thesis Chair usually approves sending the thesis draft to committee members after several reviews after the Chair is satisfied that it is ready for review by the committee.
- Negotiate with committee members the scope of their roles (see below) on the thesis.
- Read and give feedback on draft "chapters" within two weeks.
- Advise student on designing the project, preparing the Human Subjects application (if one is required), collecting and analyzing the data, and writing up the thesis. Note that the Chair must sign a Human Subjects application submitted by the student.
- Provide supportive supervision of the thesis process. However, to the responsibility to meet deadlines and maintain steady progress stays with the student.
- Convene and chair meetings of the committee, if needed.
- Be a mediator when conflict arises; the Thesis Chair has final word.
- Work with other committee members to achieve consensus on the acceptability of the thesis and to determine an appropriate grade.
- Sign the thesis signature page when the thesis is satisfactory (and for Epidemiology Department students, also sign the graduation warrant).
- Grade the thesis.

**Other Committee Members:**

- Read, give advice, and sign off on the initial thesis proposal.

- Negotiate the tasks for which s/he will carry primary responsibility in guiding the student (if necessary).
- Work individually with student on the thesis aspects for which the committee member carries primary responsibility.
- Attend meetings requested by Chair.
- Advise the student outside "formal" meetings.
- Read drafts forwarded by Chair and provide comments to student and Chair.
- Give input on timeline in light of his/her own availability, time constraints, and the amount of work required for the part of thesis the 2nd member oversees.
- Give feedback to the student within two weeks of requests for feedback.
- Discuss with student and/or Thesis Chair any concerns that student has not addressed.
- Sign the thesis signature page when thesis is satisfactory, and for Epidemiology students, the graduation warrant.

#### **Student Responsibilities:**

Although it is expected that the student receive a great deal of help and support from his/her committee members, the student is responsible for carrying out the thesis. S/he is expected to take the lead in setting up all aspects of the thesis project and to complete the project in a timely fashion. Thus, it is the student's responsibility to:

- Formulate and communicate thesis ideas to his or her academic advisor during the first year of graduate school.
- Discuss with academic advisor (and later with Chair and/or second committee member) what classes may be needed/useful for execution of specific thesis projects.
- Explore leads to gain access to data.
- Approach faculty members who have relevant, complementary expertise regarding the thesis project and ask them to be on the committee.
- Fill out the Human Subjects application, if necessary, and conduct the other necessary activities required for completion of the thesis.
- Sign up for a minimum of nine thesis credits, typically distributed over the time period in which the thesis is carried out.
- Convene the thesis committee PRIOR to executing the thesis project. Students require input and approval from both committee members BEFORE they actually conduct their thesis project.

- Set up (with help of committee members) a realistic timeline for completion of tasks. Inquire as to the travel schedules and other responsibilities of committee Chair and members that might delay approval of drafts or final product.
- Communicate REGULARLY about progress with committee members and make sure that all members receive revised and realistic timelines.<sup>1</sup>
- Provide the Chair with interim products as requested.
- Write up the thesis according to the guidelines set by the Graduate School (See the Style and Policy Manual for Theses and Dissertations).
- Be familiar with the plagiarism guidelines of the university, and abide by them in writing the thesis. These guidelines can be found at:  
  
<http://sphcm.washington.edu/gateway/plagiarism.asp>
- Submit final draft of entire thesis to committee members at least 6 weeks before the intended graduation date (roughly: November 1 for autumn, February 1 for winter, May 1 for spring, July 1 for summer). If the full draft has not been received by that time, the student should expect to graduate the following quarter.
- Conduct an oral presentation of research findings.
- Obtain signatures on the thesis cover pages from committee members.
- Submit the thesis to the graduate school

### C. Proposal

After the committee is formed, the next step is to write a thesis proposal that describes the purposes of the study and the methods for accomplishing them. The proposal should be 3-5 pages, plus any graphs or tables and should be structured using the Short Proposal Format Guidelines below. Writing a thesis proposal requires the student to be explicit about the thesis plans. It also facilitates getting constructive feedback from the committee members, which usually increases the quality of a project. Before asking the committee to review and approve a proposal, the student should ask the Chair of the committee to critique the draft proposal and then revise the proposal as recommended by the Chair before distributing it to other committee members, ideally by winter or spring quarter of the first year. The proposed format is as follows:

**I. Title Page:** Project title, student's name, Chair of committee, committee members, and date. If the committee is not yet formally constituted, indicate potential committee members being considered, including a Chair.

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<sup>1</sup> **Note:** Committee members are NOT required to approve a thesis that is incomplete to meet a pressing deadline imposed by the graduate school.

II. **Specific Aims:** List the project's immediate goals in terms of research or practice questions to be answered. The overall purpose of this line of investigation should indicate the long-term importance of the specific information being sought through this study. This section should not exceed ½ page in length and may be much shorter.

III. **Background and Significance:** Describe the scientific context for the study, briefly summarizing previous related research and/or the context and issues to be addressed in the practice setting. *This should NOT be an extensive literature review.* Keep references to a minimum by citing only those that are most relevant. This section should identify the gaps in knowledge which the proposed project will help to fill. *It should not exceed 1 page in length.*

IV. **Methods:** The format of this section may be tailored to meet the needs of the specific study being proposed. This should be the longest section of the proposal, usually 2-3 pages in length. See the outlines for research and practice thesis (above) for relevant methods questions and sub-headings for the proposal.

V. **Limitations:** Describe any limitations that are beyond the control of the project (e.g., that have already been decided upon or implemented) that may affect the results of the thesis work, or that may influence the interpretation of the study results.

VI. **Timeline:** Provide an approximate timeline for completion of the project.

VII. **References:** Provide citations to key literature references used in the proposal.

## D. Human Subjects

The Graduate School requires graduate degree students to discuss Human Subjects requirements with their thesis Chair. So that students are well versed in the policies and procedures of Institutional Review Boards, specifically the Human Subjects Division (HSD), all students are required to complete one of the web-based training courses provided online at:

[http://www.washington.edu/research/hsd/training\\_citi.html](http://www.washington.edu/research/hsd/training_citi.html) - both biomedical and social/behavioral courses are available.

## USE OF HUMAN AND ANIMAL SUBJECTS FOR UW GRADUATE STUDENT THESES AND DISSERTATIONS FORM

Both the student and her/his Chair must sign the *Use of Human and Animal Subjects for UW Graduate Student Theses and Dissertations Form* and return it to the Global Health Program Office as soon as the student's thesis committee is formed. The student is responsible for turning in the original signed form to program staff. The student is also responsible for making sure his/her Chair has a copy of the signed form on file. The Chair should not provide an entry code to allow the student to sign up for GH 700

thesis credits until the form has been received by program staff. The form is available on the Graduate School website at: <http://grad.washington.edu/forms/human-animal-advisory-certif.pdf>.

### IS REVIEW FROM THE HUMAN SUBJECTS DIVISION OFFICE REQUIRED?

As stated above, "The distinction between 'research' and 'practice' is not always clear; elements of practice are often embedded in a research thesis and research methods may be used in a practice thesis. Conceptually the difference is based on a number of elements of the activity, central of which is the question as to the main purpose and intent of the activity. Research is conducted with the intention of discovering new, generalizable knowledge; this is the main intent of a research thesis. The practice thesis, on the other hand, is meant to address a very specific public health practice issue in a specific setting, with the primary intention of supporting improvements in health or health care in that setting."

Some practice theses will require review from a Human Subjects Institutional Review Board (IRB). Most research theses that involve getting data from or about people (human subjects<sup>2</sup>), will require review from a Human Subjects IRB. To determine if IRB review is required, each student should discuss their thesis plans with their thesis Chair. The Human Subjects Division office will also offer advice on this matter, deciding on a case by case basis if the research will require a review. If necessary, Human Subjects review must be done **before beginning the research**. The UW IRB web site at: <http://www.washington.edu/research/hsd/hsdman2.html> describes the kinds of public health activities that may not require IRB review.

If it is determined that the thesis is not research (e.g, a practice thesis conducting program evaluation, surveillance, policy analysis, etc), IRB approval is not required to carry out the activity. (see page xx). However, the student (and faculty mentors) must assure that any activities with individuals, groups, or related documents related are conducted ethically and with full respect for the rights of those involved. This may include such activities as providing informed consent for interviews or requesting the approval of local institutional review boards.

Sometimes, students who conduct **non-research** data collection activities will submit, after the fact, an application to the Human Subjects Division. This is done when the student and his/her committee decide that the purpose of the student's data analysis is to create new, generalizable knowledge.

### TYPES OF REVIEW OF RESEARCH PROJECTS BY UW HUMAN SUBJECTS DIVISION

<sup>2</sup> "Human subjects" are individuals whose physiologic or behavioral characteristics and responses are the object of study in research. Under the federal regulations, human subjects are defined as: living individual(s) about whom an investigator conducting research obtains: (1) data through intervention or interaction with the individual; or (2) identifiable private information [Federal Policy • 45 CFR 46.102(f)]. In Washington State, individuals who have died are still considered to be human subjects.



Among research categories, there are three possible types of research, each requiring a different level of review. The above parameters apply to Exempt, Minimal Risk, and Full Review applications:

- **Exempt applications:** Applications that pose no risk to any parties involved and are determined to not require a Human Subjects Review are Exempt. Research falling into exempt categories is reviewed by our department. These categories are defined in the Human Subjects Manual and on the back of the Certificate of Exemption form. A Certificate of Exemption must be reviewed and approved by the Chair or Designate. Send a copy of the form to the Human Subjects Division and keep a copy for yourself. Approval is valid for five years as of the date of the Chair's signature.
- **Minimal Risk applications:** Applications that are determined to pose 'minimal risk' (the amount of risk encountered in daily life) to human subjects undergo an expedited review process through a Human Subjects Review sub-committee.
- **Full Review applications:** A full Human Subjects Review Committee reviews all activities involving the use of human subjects that do not meet the criteria for exemption or minimal risk review. The review committee meets every two weeks and applications are reviewed on a 'first come first served' basis.

If student and/or Chair have questions about which level of review is appropriate, see <http://www.washington.edu/research/hsd/hsdman3.html> or contact the Human Subjects division.

#### **GUIDELINES BELOW OUTLINE STEPS REQUIRED IF HUMAN SUBJECTS REVIEW IS REQUIRED**

All student Human Subjects applications must first be discussed, read and approved by the Thesis Chair. Once approved by the thesis chair, the application should be sent to the Department of Global Health Associate Chair for Education and Curriculum to sign off **before** submission for Human Subjects review (and before starting the research).

Students requiring Human Subjects approval MAY NOT proceed with their research until after they have received an approval number from the UW Human Subjects Division. Without prior approval, a research project may not be approved after the fact, and failing to follow proper procedure may jeopardize the completion of a students' thesis project and graduation plans, as well as publication of manuscripts.

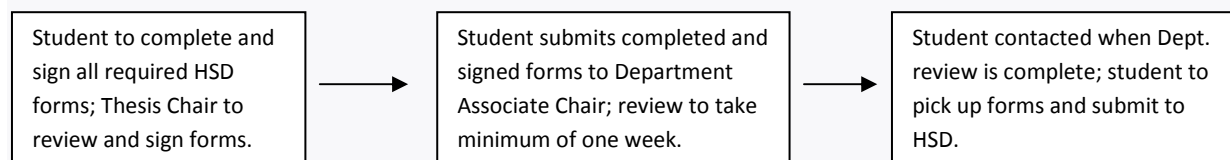
To allow enough time for the entire process, a timeline minimum of two months is recommended for an Exempt Application and three to four months for a Minimal Risk or Full Review Application. This includes the writing of the protocol and application forms, requesting letters of permission from outside collaborators or agencies, review and sign off by faculty thesis advisors, sign off by the Department (at least a week), and then time for the UW review committee's questions and final approval. Note that an application requires a detailed thesis proposal with a clear study question, all instruments to be used (survey questionnaires, discussion guides, etc.), a sampling plan, etc. before it can be submitted.

The time required for approval may vary considerably. Final approval by the UW Human Subjects Division may take as little as one week, as is typically the case with concurrence for most exempt

applications. However, it typically requires two months to process minimal risk and full review applications. If an Exempt application is denied and ends up being referred to the Minimal Risk review committee, extra time will be needed.

### GENERAL PROCESS FOR ALL PROJECT TYPES REQUIRING REVIEW

*Including Student, Faculty, Exempt, Minimal Risk (Expedited) and Full Review*



#### **Step One – Complete Application Form(s):**

All Human Subjects Forms can be found at: [http://www.washington.edu/research/hsd/forms\\_paper.php](http://www.washington.edu/research/hsd/forms_paper.php)

Student to complete Human Subjects Review Application UW 13-11, whether claiming exempt status or not. If claiming exemption, complete the Certificate of Exemption form. Note that the student is considered the Principal Investigator throughout forms; faculty sponsor refers to thesis Chair.

Student must sign all required Human Subjects forms. Student is responsible for having thesis Chair review and sign off on all forms. Student then submits completed and signed Human Subjects forms to Departmental Associate Chair for Education and Curriculum. Review at the Departmental level can take up to two weeks. When the review is complete the student will be contacted by program staff.

- **For Exempt Applications:**

If a project qualifies for Exemption from the University-level review, human subjects approval can be made at the Department level. In this case the forms will be signed by the Associate Chair. The department-approved application is returned to student who is expected to forward to the Human Subjects Division which will concur on Exempt applications within a week of receipt. Students cannot start research until that confirmation of review is received from Human Subjects.

- **For Full and Minimal Risk Applications:**

The Associate Chair's office will review for the essential information and signatures. If there are additional questions, the student will be contacted directly by the HSD reviewer.

#### **Step Two - Submit forms to Human Subjects forms:**

Follow instructions at the top of all forms and submit to Human Subjects.

**Step Three - Wait for Approval to Begin Research (however, preparatory work on the thesis such as the literature review and description of methods can be done during this interim)**

### ADDITIONAL INSTRUCTIONS AND FORMS

- Full policies, procedures and forms from the UW Human Subjects Division.  
<http://www.washington.edu/research/hsd/>
- Human Subjects Division Forms Page  
[http://www.washington.edu/research/hsd/forms\\_paper.php](http://www.washington.edu/research/hsd/forms_paper.php)
- HIPAA Compliance Resources at the UW  
<http://www.washington.edu/research/hsd/hipaa.php>

*To request more information or to submit a project proposal, please contact:*

Human Subjects Division  
[hsdinfo@u.washington.edu](mailto:hsdinfo@u.washington.edu)  
(206) 543-0098

Tanya Matthews, Ph.D  
Human Subjects Review Administrator  
[tanyam@u.washington.edu](mailto:tanyam@u.washington.edu)  
(206) 221-7918

## E. Writing of the Thesis

This may be a small section of this document but the actual writing of the thesis will likely take more time than anticipated. In general, it is best to plan on dedicating the majority of 2-3 quarters to complete a well written thesis. Typically, a student should expect 4-6 revisions before the Thesis Chair and committee give final approval.

## F. Thesis Format

The approval of the content, writing quality, and various aspects of formatting (such as layout, margins, chart and graph labeling, pagination, etc.) of the thesis are academic matters between the student and the thesis committee. Students must review carefully the "Policy and Style Manual for Theses and Dissertations" from the Graduate School. This document is located at the web address given below. NOTE: this document is always being revised so please make sure you are using the most current edition.

[http://www.grad.washington.edu/stsv/stylman/policy\\_style2008Revision.pdf](http://www.grad.washington.edu/stsv/stylman/policy_style2008Revision.pdf)

# V. TURNING IN YOUR THESIS (APPLICABLE FOR RESEARCH AND PRACTICE THESIS)

## UW Graduate School Requirements:

Drop off thesis for required Preliminary Review. Once all the main parts of the thesis are well under way, the student should submit the thesis for the preliminary format check. Incorrect style can delay graduation. Revisions to content are possible after this step – the preliminary check is only checking formatting of the title page, signature page, quote slip, and abstract-- the student's Thesis Chair and

committee check the content and other formatting aspects of the thesis. The Graduate School recommends getting the signature page checked before collecting signatures, and they are happy to check this anytime. Signature pages can be emailed, faxed or dropped off in person.

The thesis should be dropped off at the Drop Box in Communications Building G-1 during work hours: 8:00am - 4:45pm (closed 12 p.m. – 1 p.m.) Fill out and enclose a purple information sheet (found near the Drop Box). Students who have had a preliminary format check receive priority for the final submission. Preliminary checks will be done for documents that are dropped off at the Graduate School prior to finals week. No appointment is necessary, and results will be available within 3-6 working days.

Once the document has been evaluated, students are notified via email that it is ready to be picked up. It can be picked up in person or sent via campus mail. Documents will NOT be sent back via US mail unless a self-addressed, stamped envelope is submitted with the correct postage. If changes are needed, specific correction information, on a blue form, will be attached to the document. *Keep the blue form for final submission.*

#### ***A note on signatures...***

Each committee member must sign the signature page. Signatures should be on the signature page, not the cover page. Students with a committee member who is hard to reach sometimes obtain the signature pages signed in advance - but only after they have had their signature page checked by the Grad School!

Pay Binding Fee. All Master's students who complete a thesis as part of their program are required to submit two copies of their thesis to the Graduate School as part of their graduation requirements. The Binding Fee is \$25. This pays for the binding of the two copies submitted, which will be kept in the UW Library – one for circulation, and the other for their archives.

Payments are made to Student Fiscal Services (SFS) in the Cashier's Office on the first floor of Schmitz Hall or via phone, email or US mail. Payment options, including telephone and email, are listed on page 4 of the Policy and Style Manual. Students are required to present a printed itemized tuition statement as proof of payment of the Binding Fee to the Graduate School staff when making their Final Thesis Submission.

Schedule an appointment for Final Thesis Submission. Write [gsstusrv@u.washington.edu](mailto:gsstusrv@u.washington.edu), call 206-543-5900, or go in person to the Graduate School Reception Desk, Communications Building G-1.

Documents are not evaluated or accepted for graduation on a walk-in basis. The ONLY exception is during finals week when final submission is on a first-come first-served basis, and the wait time can be several hours. As noted above, a preliminary check is required prior to the final submission appointment. Appointments during quarter breaks are only available if the staff has time.

Note – If a student waits until finals week, Final Submissions are accepted only on a walk-in basis. Wait times can be several hours and spring is the busiest quarter. If a student is in line after 5:00 p.m. on the

last day of the quarter, s/he will not graduate. If a student does not turn his/her completed thesis by the last day of the quarter, s/he will have to turn in his/her thesis in a future quarter.

Go to Final Thesis Submission appointment at the Graduate School Office in Communications Building G-1; see page 5 in the Policy and Style Manual for a detailed list of what to bring to this appointment.

### **Departmental Requirements:**

The Department keeps a copy of all student theses on file. Please submit an electronic copy to [ghprog@u.washington.edu](mailto:ghprog@u.washington.edu).

Students should also provide a copy of their final thesis to each committee member.

### **Graduate Late Fee option:**

If you do not turn in your completed thesis or dissertation by the last day of the quarter, you may be able to use the Graduate Degree Late Fee (\$250) option. For more information on the Late Fee option, visit <http://www.grad.washington.edu/degreetatefee.html> and contact GH MPH Program Staff.

## **VI. OTHER INFORMATION**

### **A. FAQs**

Graduate Student Services has developed a Frequently Asked Questions page for students seeking a quick answer to a thesis or dissertation question. The FAQ page can be found at:

<http://www.grad.washington.edu/stsv/FAQ-style.htm>

Thesis/dissertation submission tips and submission deadlines are at <http://www.grad.washington.edu/area/thesissubmittips.html>

### **B. Timeline**

Most students have chosen a thesis topic, assembled their committee, and are working toward their thesis by the end of their first year, or at latest the beginning of the second year.

Once the thesis committee has approved the thesis proposal, the student and committee should establish a schedule for completing the thesis that is feasible and has a realistic chance of being completed on time.

The timeline for completion - and therefore, graduation - should specify the academic quarter when the final version of the thesis will be completed. For any given quarter, the Graduate School specifies the last possible date and time when it will accept a thesis. For example, in Spring Quarter the Graduate

School may require that theses be submitted by 5:00 pm on the second Friday of June. To be conservative, a student and thesis committee may plan to complete the final version of the thesis at least two weeks earlier. To reach this goal, a student must complete the first draft of the thesis by the end of April.

In addition to hard deadlines, students must be aware that faculty members who serve on Global Health thesis committees often travel abroad, and that this can delay completion of a thesis. In general, a student can be expected to submit 4-6 drafts to his/her thesis committee. Students are responsible for knowing when their committee members are traveling so that they can graduate the quarter they intend to. A sample thesis schedule is presented below (not all in sequential order).

#### Year 1

- Get ideas
- Talk to people about thesis ideas, settings, opportunities
- Look at previous theses in the library and search theses by department through the library's on-line catalog.
- Take courses that will help complete the thesis
- By the Spring of the first year and no later than Summer quarter choose a Thesis Chair, if different from the academic advisor (PCMI students should begin conversing with a potential Chair and committee members)
- Choose a thesis committee
- Develop a formal structure for the thesis and submit a thesis proposal to the committee
- Obtain committee approval of proposal
- Apply to human subjects committee
- Begin the literature search

#### Year 2

##### Summer or Autumn

- Make logistic arrangements
- Pilot test instruments as relevant
- Start data collection
- Write background and literature review portion of thesis

##### Winter

- Check-in with the committee
- Make final arrangements and finish data collection
- Analyze data
- Start writing the thesis (i.e., background, methods)

##### Spring

- Write up the thesis and submit to the thesis committee – allow time for multiple drafts
- Revise thesis to address committee reviews
- Present the thesis to Global Health students, faculty and staff

Rather than operating in "crisis mode" and contacting committee members only when problems arise,

students and faculty may prefer meeting on a regular basis to monitor progress and address any problems that may have emerged. The frequency of meetings may vary during different stages of the thesis process, with more frequent meetings (e.g., every two weeks) in the first and last stages and fewer in between. In particular, students should meet periodically to discuss the data analysis and interpretation of results. Typically a student meets with committee members individually, although occasionally meetings with the entire committee are useful.

### C. Publication of the Thesis

Everyone benefits when a student's thesis is published, even though it is not a requirement for graduation:

- \* The student benefits through the satisfaction of having made a contribution. Also, through publication the work becomes known to colleagues, which builds the student's reputation and resume.
- \* The field benefits from the dissemination of the thesis results to other health professionals.
- \* The MPH Program benefits, since publication advertises the quality and content of the program overall.

The thesis can usually be written in a format that satisfies both the Graduate School and a target journal with minor modification. It is often helpful to choose a journal before starting to write, and consult its "Instructions to Authors" (usually published in a regular issue of the journal a few times a year).

Co-authors usually include others who made a "meaningful scientific contribution" to the work – often the Thesis Chair, other committee members, and others outside the University who played a key role in the work.

**The Department of Global Health MPH faculty and staff hope this document has been helpful in the thesis process. Please let program staff know if you have questions or comments about this document.**