

Writing and Defending Honors Theses in Public Health

Disclaimer: “In the Honors Program, a ‘departmental thesis’ refers to a thesis completed within a student’s major, in collaboration with both the major department and the Honors Program. For this purpose, the Public Health Program is treated as a department.”

1. Types of Honors

- a. **Departmental Honors:** Departmental honors entail writing and defending a thesis within your major. If the requirements for departmental honors are completed, Latin Honors are applied to the major. Requirements for these theses are often defined by your major department, and you will need to contact the department to get approval to pursue departmental honors. The Honors Council Representative from your major department ([listed here](#)) will be one of the members of your thesis committee. The Honors Council Representative for Public Health is also listed on the [Public Health Program website](#). Public Health Program-specific honor thesis information, including the form to apply to pursue honors in public health, can be found on the [Public Health Program website](#).
- b. **General Honors:** These are interdisciplinary theses. [The eligibility criteria are listed on the Honors Program website](#). There are project and course-related requirements to pursue a General Honors Thesis. Applications to pursue general honors are submitted to the Honors Program. The requirements for General Honors are applied to the Arts and Sciences degree, rather than a major. An Honors Program faculty member will be your Honors Council Representative.

2. Planning for Your Honors Thesis¹

- a. Please note that if your final semester at CU Boulder is not in the spring semester of your fourth year, you will need to adapt the following timeline accordingly
- b. **First and Second Year**
 - i. Take varied coursework in Public Health and begin to identify topics that interest you (think about why they are interesting)
 - 1. Read more about these topics outside of the readings you are assigned in class. You can ask faculty members to help you build a reading list

¹ [Honors Program](#)

- ii. Go to office hours for the courses you are taking and talk to faculty about their research interests
- iii. Get research experience by working as a research assistant during the school year or in the summer
- iv. During the spring semester of your second year, consider [applying for StudioLab](#) to gain research experience. If you have already identified a faculty member with whom you may want to work, contact that faculty member and communicate your interest in working with them.

c. Third Year Fall Semester

- i. Take upper-division coursework in areas of public health that interest you
- ii. Decide on your general research topic (it can be quite broad at this stage)
 - 1. Read peer-reviewed journal articles about this topic and take thorough notes on what you read. To help you organize your work, you can use a tool like [Zotero](#). Consult with faculty members who do research on this topic for suggestions on articles to read.
- iii. Decide on the type of thesis you plan to write (departmental vs. general)

d. Third Year Spring Semester

- i. If you are planning to write a departmental thesis, talk to the Public Health Honors Council Representative to learn about departmental and university requirements and deadlines
- ii. Ask a faculty member to be your thesis advisor by January 15th.
- iii. Begin designing your research project
- iv. If needed, apply for funding for your research. One potential source is the [Undergraduate Research Opportunities Program \(UROP\)](#). Their application deadline is generally in [February](#) for funding in the following academic year.
- v. Determine whether you need approval from the Institutional Review Board (IRB) to do your research project. This should be done with your faculty advisor. If you do need approval, see the [IRB website](#) for details. Submit for IRB approval, if needed, by March.
- vi. Fill out [the form at the bottom of the Honors Thesis page on the Public Health Program Website](#) to indicate that you will be taking the Honors Thesis Capstone Course in the following fall semester. This should be done before Spring Break.

e. Fourth Year Fall Semester

- i. Take PBHL 4342 Honors Thesis Capstone
- ii. Obtain departmental approval by asking the Public Health Honors Council Representative to serve on your thesis committee.
- iii. Ask one other faculty member to serve on your committee as an outside reader. More information on committees can be found below in Section 5.c.i.
- iv. Draft your thesis prospectus (template on the [Public Health Program website](#))
- v. Register your honors thesis with the Honors Program by the registration deadline. This date varies slightly from year to year, but can always be found on the [Honors Program website](#).
- vi. After registering your thesis, send emails to your thesis advisor and Honors Council Representative asking them to email the Honors Program approving your thesis.
- vii. Begin writing your thesis and exchange drafts with your advisor. A thesis template is available on the [public health website](#).
- viii. Meet regularly with your advisor. Meetings with your advisor should occur at least once per month, but preferably every other week to ensure you stay on track with your research.

f. Fourth Year Spring Semester

- i. Continue writing your thesis and meeting with your advisor
- ii. Schedule your defense date in accordance with the guidelines listed on the [Honors Program website](#) (dates will vary year to year).
- iii. Circulate the defense copy of your thesis to your committee at least one week before your defense date (this week cannot include Spring Break). The exact timeline for circulating the defense copy will depend on your committee, so ensure you understand their expectations for the defense copy when you schedule your defense date.
- iv. Defend your thesis. The deadline to defend is usually several weeks before the end of the semester. [Please see the Honors Program website for more specific information about defense deadlines.](#)
- v. Make any revisions necessary and file the archival copy of your thesis on CU Scholar by the deadline. You may embargo your thesis when filing it with CU Scholar, should you wish to publish it elsewhere.
- vi. Attend Honors Convocation and graduate with Honors!

3. Departmental Requirements for Approval

- a. To obtain departmental approval to pursue an Honors Thesis, the following criteria must be met
 - i. Have a minimum GPA of 3.300 (cumulative GPA).
 - ii. Complete the form on the [Public Health Program Website](#) to register for PBHL 4342, the Honor Thesis Capstone Course.
 - iii. Register for and attend PBHL 4342.
 - iv. Have a thesis advisor willing to supervise your project
 - v. Ask the Public Health Honors Council Representative, Dr. Sigrid Van Den Abbeele, to serve on your thesis committee.

4. Thesis Formatting and Content

- a. Public health is a multidisciplinary field. As a result, your advisor may have additional formatting requirements beyond those listed below. The guidelines listed below are also included in the Honors Thesis template that can be found on the Public Health Program Website.
 - i. **Abstract:** A short summary (typically 150-300 words) of the study. This summary should include the problem being studied, the objective(s) of the study, a brief description of the data and methodology used, the key findings, and the conclusions of the study. An abstract may be structured (list each of the above criteria individually) or unstructured. Abstracts can also be followed by keywords relevant to the research².
 - ii. **Introduction or Background:** The introduction should briefly introduce the problem or topic being studied. This description should include the current extent of the topic and demonstrate the existing gap in the literature the research will fill. This should connect to the rationale for selecting the project. For an honors thesis, the introduction should be broad and should include relevant abbreviations and terms to allow for non-experts (like the outside reader) to understand the context of the work. This section should lead to the objective(s) and hypothesis(hypotheses) of the study. If the literature review for the study is quite long (more than 2-3 pages), provide a short introduction including the objective(s) and hypothesis(hypotheses), and then include a separate Background section for the literature review³.

² Aravind, P. G., & Kathirvel, S. (2024). Principles of public health research and writing. In *Principles and Application of Evidence-based Public Health Practice* (pp. 23-40). Academic Press.

³ [IPHY Honors Thesis Guidelines](#)

iii. Data and Methods or Materials and Methods (dependent on topic):

The purpose of this section is to provide a detailed description of everything that was done to complete the study. The level of detail should be sufficient to replicate the study⁴.

1. For studies using existing data, this section should include a detailed description of the sources of data, the data cleaning process, and the analysis completed in the study.
2. For studies collecting data, this section should include information about the study design and setting, the criteria for including or excluding participants, the sample size and technique, a description of the interventions/controls or exposures used, the data collection methods and any tools used in data collection, the outcomes of the study, the analysis completed in the study, and a discussion of the ethics of the research (including information about IRB approval)⁵.
3. For studies using lab equipment or chemicals, this section should also include the name and location of the headquarters of the company where the materials were purchased⁶.

iv. Results: This section involves the reporting of the results of the study.

This is done with a series of written text, tables, and figures. This section should not contain an analysis of results. See peer-reviewed publications related to the study topic for specific examples of how to format figures and tables. Generally, figures and tables should be referred to as Figure X or Table Y in the text. The text written about a figure or table should not summarize all of the findings within that figure or table, and should instead focus on the main “takeaways” from that table. Captions for figures and tables should be brief and should not report the results within the figure or table. Instead, they should contain the key information and context needed to interpret the results⁷.

v. Discussion: The discussion section is the place for the analysis or interpretation of results. In this section, there should be a brief

⁴ [IPHY Honors Thesis Guidelines](#)

⁵ Aravind, P. G., & Kathirvel, S. (2024). Principles of public health research and writing. In *Principles and Application of Evidence-based Public Health Practice* (pp. 23-40). Academic Press.

⁶ [IPHY Honors Thesis Guidelines](#)

⁷ Aravind, P. G., & Kathirvel, S. (2024). Principles of public health research and writing. In *Principles and Application of Evidence-based Public Health Practice* (pp. 23-40). Academic Press. And [IPHY Honors Thesis Guidelines](#)

summary of the key findings of the study, an analysis of these findings (speculation about what they mean, why they occurred, etc.), and contextualization of the findings within the relevant literature. Additionally, the discussion should include information about the strengths and limitations of the study as well as any connections to public health policy or practice⁸.

- vi. **Conclusion:** A brief statement of the most important findings from the study and their relevance to the audience.
- vii. **References:** All work used and cited in the paper should be included in the reference list. This should include external sources of data used in the study. The reference list should follow the guidelines specified by an appropriate citation style like APA or AMA/APHA. The reference list should be updated throughout the project, rather than created at the end of the project. Using a citation manager like Zotero can help make this process more manageable.
- viii. **Appendix:** This is where all supplemental materials should be included. The type of information included in the appendix depends on the study design, but could consist of a detailed list of variables used from external data sources, supplementary analysis and robustness checks, the survey used in the research, etc.

5. Forming Your Thesis Committee

a. Thesis Advisor

- i. Public health has very few rostered faculty members, so the thesis advisor does not need to be rostered in the Public Health Program. They also do not necessarily need to be affiliated with the Public Health Program either. However, the [affiliated faculty members of the Public Health Program](#) have agreed to support the program in numerous ways, including advising honors theses in public health. The role of the honors thesis advisor is to provide expertise on the topic of the honors thesis. This person will help ensure that the project is properly defined, meet frequently with the student, read and offer revisions on drafts, and provide any additional advising as necessary.

b. Honors Council Representative

⁸ Aravind, P. G., & Kathirvel, S. (2024). Principles of public health research and writing. In *Principles and Application of Evidence-based Public Health Practice* (pp. 23-40). Academic Press.

- i. In the Public Health Program, this person will approve a project that will constitute departmental approval to pursue an Honors Thesis. Additionally, this person will serve as a liaison between the student, the department, and the Honors Program and help you understand the rules, policies, and procedures of both the Honors Program and the Public Health Program. They will also help with logistics for writing and defending a thesis. To write a departmental thesis in public health, the Honors Council Representative must be from the Public Health Program.

c. Outside Reader

- i. This is a faculty member from outside the major department who helps to ensure that thesis standards are similar across departments. At a minimum, this person will read and provide feedback on the final draft of the thesis and attend the defense, though they may be more involved depending on the project. This role can be difficult to fill, so start early and ask for help if needed. Public Health Program-affiliated faculty should not be selected as outside readers for honors theses in public health, unless their expertise differs sufficiently from the thesis topic. Please contact the Honors Council Representative from public health if you have questions about this role.

d. Changing Committee Members

- i. Should you wish to change a committee member after registering your thesis, you can do so by emailing the change to the Honors Program at honors@colorado.edu

6. Registering Your Thesis with the Honors Program

- a. Each semester, there is a deadline for registering your thesis with the Honors Program. By this deadline, you should have:
 - i. Drafted your prospectus following the template on the Public Health Program website and made revisions based on feedback from your Thesis Advisor and your Honors Council Representative.
 - ii. [Filled out the form on the Honors Program website to register your thesis.](#)
 - iii. Emailed your Thesis Advisor and Honors Council Representative, asking them to email the Honors Program approving your thesis.
 - 1. Thesis advisors are supposed to agree to the statement: “I have discussed the project proposal with the student and agree to provide the necessary help and direction for the project.”

2. Honors Council Representatives will agree to the statement: “I have met with the student and give my department’s approval for them to pursue Latin honors. I agree to serve on their thesis committee.”

7. Tips for Getting Started and Writing

a. Defining a Research Question

- i. Research questions can be difficult to define and will likely be refined throughout the Honors Thesis process. Ideally, research questions draw from existing literature to identify a gap in the literature that the study will address and specify how that gap will be addressed. The thesis advisor may help define a research question, or a student may develop one independently and then consult with their thesis advisor. Regardless of how the question is developed, much of the time spent on the Honors Thesis will entail finding and reading relevant scientific literature.

b. Finding Sources

- i. The search for sources should be ongoing throughout the project. Databases can be accessed through the [CU Boulder Library Website](#). Google Scholar is another excellent resource that can help identify studies that have cited a particular research article. This allows for an exploration of the “dialogue” of scientific research and a combination of classic and contemporary research to support and contextualize the project. Meeting with a research librarian to help you find sources is highly encouraged.

c. Professional Writing and Writing Support

- i. The thesis should be written in professional language similar to that used in peer-reviewed articles. It should also be free of spelling and grammatical mistakes. Writing a thesis can be daunting and should not be done all at once. Instead, an increasingly detailed series of outlines can be developed as the research progresses. These outlines should be accompanied by detailed notes (sometimes called a project log) about any decisions made by the researcher. The combination of the outline and notes will make writing the full thesis easier. Ideally, a full draft of the thesis should be complete about four to six weeks before the intended defense date to allow for multiple rounds of revisions with the thesis advisor.
- ii. There are several resources to help support students in writing honors theses. The first is PBHL 4342, in which students will write several

sections of their honors thesis, learn how to write each section of a research paper, and learn to prepare presentations. Another is the [Honors Writing Support Program offered by the Writing Center](#). This program allows for a semester of biweekly support for students writing honors theses. There is an application process for the program. Students should consider which semester they would like to apply for.

d. Use of Artificial Intelligence

- i. The Honors Program does not allow for the use of Generative Artificial Intelligence (AI) on Honors Theses except within a few acceptable use cases. Please see the Honors Program AI Policy listed on the [Public Health Program Website](#).

e. Archival and Defense Copy

- i. **Defense Copy:** This is the final copy of the thesis completed prior to the defense. It should be submitted to the thesis committee before the defense (a deadline specified by the committee) and will be used to determine the student's level of Honors. It will also be submitted to the Honors Program by the specified deadline.
- ii. **Archival Copy:** This is the copy submitted on CU Scholar after the defense and will include any revisions requested by the committee during the defense. This copy must be uploaded to CU Scholar by the specified deadline. Students may embargo their thesis in CU Scholar if they wish to publish it elsewhere.

8. Thesis Defense and Filing Your Thesis

- a. The defense must be completed before the Honors Program deadline. Please see their website for the specific deadline for the semester of intended graduation.
- b. **Purpose:** An oral defense is an opportunity to demonstrate familiarity with the research topic, communication skills, and critical thinking. The defense should focus on how the research topic fits into the "bigger picture" of the scientific context. It will also allow for a conversation and reflection on the research and future directions for the work⁹.
- c. **Scheduling:** To schedule the defense, all committee members should be contacted to find a date and time that works for everyone. Schedule a two-hour window to ensure ample time for the defense. The end of the semester is a busy time for faculty, so be proactive in scheduling your defense. Once a

⁹ [IPHY Honors Thesis Guidelines](#)

date and time have been selected, contact Owen Sanchez (Owen.Sanchez@colorado.edu), the Public Health Program Assistant, to reserve a room for the defense. The room should be reserved for a two-hour window. Make sure the room has a projector.

- d. **Preparation:** Prepare a 15-20-minute presentation about the project, usually given via PowerPoint or Google Slides. This presentation should include the rationale for selecting the topic and demonstrate the project's connection to the broader scientific context. A summary of the methods should be given to explain how the study's objective(s) were addressed in language that can be understood by all committee members. A brief summary of the results and conclusions of the study should also be included in the defense, as well as a realistic description of any limitations of the work. Practicing this portion of the defense is highly recommended.
- e. **Defense Structure:** The defense will begin with the student giving their presentation summarizing their study. This will be followed by questions and discussion from the committee about the project, which may take between 20 and 45 minutes. The student will then be asked to leave the room while the committee deliberates. After this deliberation, the student will return to collect their belongings. Questions from the committee may be drawn from:
 - i. Any aspect of the student's research mentioned in their presentation or thesis.
 - ii. Background knowledge on the student's topic
 - iii. Connections to relevant literature
 - iv. Aspects of the research that the student could perform differently
 - v. The student's future plans, including future directions for the project

9. Honors Designations

- a. *Cum laude*. GPA range: 3.300-3.499
- b. *Magna cum laude*. GPA range: 3.500-3.799
- c. *Summa cum laude*. GPA range: 3.800-4.000
- d. The above classifications are the baseline, and the written thesis, defense, and GPA are all taken into account in the consideration of the final Latin Honors Designation. For *Magna* and *Summa* designations, the defense and written thesis must convey a clear command of the "big picture," and the research should be conducted somewhat independently. *Summa* designations require an "impeccable" defense and a written thesis.
- e. Considerations for higher Honors designations that are suggested by the cumulative GPA, the thesis, and defense must be two levels higher than the

GPA. For example, graduate-level work is required to earn a *Summa* designation if the GPA is 3.300-3.499.

- f. After a defense, the thesis committee will write a letter (or letters) to the Honors Council recommending a particular level of honors. The Honors Council has the ultimate say in the level of Honors awarded and whether Honors is awarded at all. The Honors Council is a group of faculty who represent all departments in the College of Arts and Sciences. Their role is particularly important if the thesis committee is not unanimous on the level of Honors to award or if the recommended designation is higher or lower than the GPA suggests. In these cases, the defense copy of the thesis is circulated to the Honors Council members.

10. Withdrawing or Deferring Your Honors Thesis

a. Withdrawing

- i. To withdraw from writing an honors thesis, please email the Honors Program at honors@colorado.edu as well as your thesis committee. There is no penalty for withdrawing your thesis. However, you would still need to complete PBHL 4342, the Honors Thesis Capstone in order to complete the capstone requirement for the Public Health major.

b. Deferring

- i. Should you need more time to complete your thesis, you can defer your thesis and graduation to a later semester. You will need to get approval from the Honors Council Representative by emailing them: the new semester for your defense, the new semester for your graduation, approval from your thesis advisor and outside reader of your new deadline and an indication that they will continue to serve on your committee or the names of the faculty that will replace one or both of these committee members, and a plan for completing your thesis by the new deadline.
- ii. Once you have approval from the Honors Council Representative to defer your thesis, you will need to change your graduation semester in the Buff Portal. This is important because Latin Honors can only be awarded to undergraduate students. You cannot graduate before you defend your thesis. However, you do not have to be enrolled in classes during the semester that you defend. Please see the [FAQs on the Honors Program website](#) for details about how to retain university benefits while not enrolled in classes.

- iii. Notify the Honors Program of your intent to defer and any changes to your committee by emailing honors@colorado.edu.
- iv. Please note that the Honors Council only meets twice a year, once in the fall semester and once in the spring semester. This means that you need to defend your thesis by the deadline for the semester in which you plan to graduate or earlier. If you are planning to graduate in the summer, you would need to defend your thesis by the spring semester deadline for the spring semester prior to the summer you plan to graduate.

11. Helpful Resources

- a. [Honors Program Website](#)
 - i. [Getting Started Document](#)
- b. [Honors Council Representatives](#)
- c. [Public Health Program Website](#)
- d. [IPHY Honors Thesis Guidelines](#)
- e. [CU Boulder Library](#)
- f. [CU Boulder Writing Center](#)
- g. [Undergraduate Research Opportunities Program](#)
- h. [Institutional Review Board](#)
- i. Aravind, P. G., & Kathirvel, S. (2024). Principles of public health research and writing. In Principles and Application of Evidence-based Public Health Practice (pp. 23-40). Academic Press.
- j. [CU Scholar Arts and Sciences Honors Repository](#)