Arts and Sciences Honors Program

Writing and Defending a General Honors Thesis: Student Guide

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Writing and Defending a General Honors Thesis: Student Guide

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I. General Honors

1. What is General Honors?

General Honors projects are meant to demonstrate a College of Arts and Sciences student's ability to conduct creative or scholarly research of a broad interdisciplinary nature. Students who choose to pursue General Honors generally combine topics that combine two or more Arts and Sciences disciplines.

Examples of previous General Honors projects include:

- a novel (English) about parasitology (MCDB);
- a discussion of graffiti (Art History) and how it affects democracy (PSCI);
- nutrition (IPHY) and social good (SOCY);
- Asperger’s syndrome (NRSC) and education (EDUC);

To see more examples of General Honors theses, visit the Undergraduate Honors Theses Repository on CU Scholar and do a keyword search for “General Honors” (in quotes).

2. Eligibility Criteria

To be eligible to pursue General Honors, a student must fulfill all of the following criteria:

- Be a student in the College of Arts and Sciences;
- Have a 3.5 cumulative GPA or higher;
- Have completed or be able to complete the General Honors Core (see below);
- Have an interdisciplinary thesis idea.

Distributed Studies students: students pursuing a Distributed Studies degree may choose to apply to complete a General Honors thesis project OR select an appropriate topic in one of their participating departments (contingent on departmental approval). The honors designation would be attached to the Distributed Studies degree.

3. The General Honors Core

To be eligible for General Honors, students must complete or have a plan to complete at least 4 classes/12 credits of Honors Program/Honors RAP courses with a grade of A or B. This coursework must include one course from each area of the General Honors Core. There are four areas of the General Honors Core: Humanities, Social Science, Natural Science and the Senior Seminar.

4. Determining your eligibility

1. Print our General Honors Eligibility Worksheet.
2. Print your unofficial transcript from myCUinfo.
3. Open our list of courses that count toward the General Honors Core.
4. Match the Honors Program/Honors RAP classes on your transcript to their categories in the General Honors Core, and complete the chart on the General Honors Eligibility
Worksheet. You can tell which courses are from the Honors Program or Honors RAP by looking for “Arts & Sciences Honors Course” on your transcript. Courses without that notation are not Honors Program/Honors RAP courses and cannot be used to fulfill the General Honors Core.

If you're reviewing your course history on myCUinfo instead of on your transcript, Honors Program/Honors RAP courses have the section numbers 880-889/888-890R. Courses without these section numbers are not Honors Program/Honors RAP courses and cannot be used to fulfill the General Honors Core.

Courses that do not count toward the General Honors Core: Courses taken outside of the Honors Program or the Honors RAP do not count toward the General Honors Core. This includes honors courses offered by any department other than the Honors Program or honors courses taken at another university.

5. Thesis idea and thesis advisor

Your first step is to come up with an interdisciplinary thesis idea. Along with your interdisciplinary thesis idea, you should also talk with a member of the CU Boulder faculty about possibly serving as your thesis advisor for a General Honors thesis. This person should have some scholarly connection to your thesis idea. Refer to the Graduation page on the Honors Program website for faculty eligibility requirements.

6. Project approval

All General Honors projects must be approved by the Director of the Honors Program. Once you have completed the General Honors Eligibility Worksheet, email the Director of the Honors Program to set up a meeting to discuss your project proposal.

Bring the following materials to your meeting with the director:

- A copy of your unofficial transcript;
- A paragraph or two describing your thesis idea;
- A short bibliography (2-5 works) you’ve consulted so far.

Be prepared to talk about your project and how you plan to complete it.

If your project is approved, your committee will need to contain an Honors Council representative from the Honors Program faculty (Abby Hickcox, Janet Jacobs, Daniel Jones, E. Christian Kopff, Paul Strom). This faculty member will function as a secondary advisor whose main job will be to ensure your project remains interdisciplinary. You should maintain regular communication with this thesis committee member as well as your thesis advisor as you work to develop and carry out your interdisciplinary project. Especially since you are working outside of or between university departments, it is your responsibility, in collaboration with your committee members, to design and implement a successful honors thesis plan.
7. Registering your project

Once your thesis project has been approved, you can submit your registration paperwork and required attachments. You also have the option to receive General Honors research and writing credit by taking HONR 4559: Honors Thesis.

II. Thesis Content & Formatting

1. General Guidelines

General Honors research is designed to demonstrate a College of Arts and Sciences student's ability to conduct creative or scholarly research of a broad interdisciplinary nature. Consequently, the guidelines given here for formatting of the thesis should be used only as a guide; the format of the thesis should be tailored to the thesis topic and research in consultation with the thesis advisor.

An honors thesis should follow the general format of a peer-reviewed publication in your research area (for scholarly research), but should contain a more extensive background and discussion section, for example. You should use (1) headers for sections and sub-headers for subsections and include: (2) an abstract, (3) an introduction that contains a clear hypothesis, research question, and/or thesis statement, (4) a literature review, (5) a methods section (if applicable), (6) a results section (with figures, tables, and/or schemes, if applicable), (7) a discussion or analysis section, (8) a brief conclusion section, and (9) a references section or works cited list. In addition, you must include (10) a title page (see an example on page 12 of this document or past theses on CU Scholar). In some theses, the Results and Discussion/Analysis sections may be combined into one section. For more detailed descriptions of these sections, see below.

(1) Headers and Subheaders:
These include the names of sections (i.e., Abstract Introduction, etc.), as well as natural subsections within those sections (e.g., Data Collection, Data Analysis, etc.). You might choose to divide your thesis into “chapters,” but it is not required.

(2) Abstract:
This is a brief summary of your research that includes 1-2 sentences of introduction, 1-3 sentences of methods, 1-3 sentences of results, analysis, and conclusions, and 1-2 sentences for how the research impacts the field at large. The abstract should be 150 to 400 words in length and should follow the title page (and acknowledgments, if any).

(3) Introduction:
Introduce the fields that you are studying and clearly demonstrate a need for your research (i.e., an open gap or question), and tie this to a rationale for choosing your topic. State how the topic is interdisciplinary, and why an interdisciplinary approach to the topic is appropriate. The Introduction should be longer and broader than is in typical peer-reviewed articles, and must be accessible to people who are not conducting research in this field. You should introduce all concepts and define all technical terms and abbreviations for non-expert readers. The purpose of this section is to lead into your hypotheses, research question, and thesis statement, so that readers understand why you are asking certain questions, and what kinds of findings you expect.
Clearly state your hypotheses, research question, and/or thesis statement (as appropriate to your project), giving justification for why you think what you do.

If you have a large amount of background information on the topic (i.e., more than 2-3 pages), provide a short general introduction ending with your hypotheses, research question, and/or thesis statement, and follow up with a Background section after this brief introduction.

(4) Literature Review:
The purpose of the literature review is to inform the reader of existing research (i.e. “literature”) on your topic. You should demonstrate to your readers that you have read enough to be a credible researcher and lend credence to your study and findings. The literature review will inform the reader of the research context in which your study exists and on which your study builds. For an interdisciplinary project, you will likely summarize two or more distinct topics of research in this section. For an overview of what a “literature review” is, see http://www.lib.ncsu.edu/tutorials/litreview/.

(5) Methods:
This section is a detailed description of how you performed your study and how you analyzed your results. Using past tense, describe your methods and analysis (as appropriate to your project): (1) how you decided what data were necessary to collect, (2) how you collected the data (include interview or survey questions in an appendix, if applicable), (3) how you analyzed the data (include a description of analytical method used, including relevant primary codes for qualitative data), (4) how you justified the type of analysis chosen (i.e. why did you use the type of analysis you did, instead of other types of analysis?).

If you conducted a lab experiment or quantitative analysis, include everything necessary to completely replicate your experiment, from the statistical program you used to analyze your results, to the equipment used (for equipment and reagents provide the name of the company from which they were purchased and the location of the company’s headquarters).

(6) Results:
Using past tense, succinctly report your results in a well-organized way. Use text, as well as figures, tables and schemes, as applicable. If you have separate Results and Discussion/Analysis sections, do not discuss or analyze results further in this section.

If you include figures, do not report results in legends of figures or tables or simply restate numbers and data points. Summarize and explain data in the text. Figure captions should include a first sentence that clearly indicates what results are shown in the context of your research question, followed by a brief statement of any context for results (e.g., the treatment applied or the relationship displayed, etc.), the subjects (and sample size) studied in the experiment, a key to any abbreviations used, and statistical test annotations. Refer to all tables and figures in the text (e.g., see Table X), and also indicate the main “take home point” about the figures/tables in the text.

(7) Discussion or Analysis:
In this section, summarize and interpret results, discuss potential strengths and weakness of the results in a constructive manner, refer to other studies that either contradict or corroborate your results, and present possible future research. Be sure to highlight how your data provides some novel insight.
If you have separate Results and Discussion/Analysis sections, do not list your results in any detail again; you may refer to figures/tables in the Results section. It is important to have a structure to your discussion; it often works well to discuss your overall findings first, and then individual findings in the same order as in the Results section.

If you combine your Results and Discussion/Analysis sections, present your data in a thematic, logical way that is structured in accordance with your analysis (e.g. according to major themes or codes you used in analyzing qualitative data).

(8) Conclusions:
This is a brief, concise statement of the most important findings of your research and how they are immediately interesting to the audience. You can restate your argument (your thesis statement, but paraphrase it) and very briefly summarize main points from your analysis. You can also discuss future research directions or unanswered questions in this section.

(9) Reference or Works Cited List:
List all previous literature/studies that you read, used and cited in your paper. Do not wait to compile your reference list until the last draft! For every draft you submit, your reviewers will want to see the list of research and documents you are relying on. The purpose of the reference list is to demonstrate to your readers that you have read enough to be a credible researcher and lend credence to your study and findings. Follow the format of citations in a sample peer-reviewed publication in your research area, and keep it consistent. In consultation with your advisor, choose a citation style (e.g. APA, Chicago, MLA, etc.) for your thesis and use it consistently, both in the reference list and in in-text citations or footnotes.

(10) Title Page:
See the template later in this document. All title pages must contain the following: your thesis title, your name, your discipline (in this case, General Honors), your defense date, and each member of your committee and the department they come from, with the thesis advisor specified.

In your thesis, you should communicate information in a succinct professional writing style, like in a peer-reviewed publication, and should not use colloquial or “lab” jargon. Be sure to check your grammar and punctuation. The thesis should flow from one section to another – your introduction should set up the need for your project, your methods should clearly demonstrate how you will fill that gap, your results should show how the gap was addressed and/or filled, and your discussion should expound on the results and show how your study leaves room for other studies and creates more gaps—questions—to be filled and answered. Every section should begin with “hints” that keep the reader informed about what is coming and why. There should typically be very few direct quotes from previous research; paraphrase ideas and give citations for all thoughts, ideas or results reported. Whenever you make a statement of fact, you must support this claim using previous research. Use in-text citations or footnotes at the end of every sentence that references another scholar’s work following the format of a peer-reviewed publication in your research area, e.g., for APA (Møller et al., 2009). Any quote or information taken from a specific page should include a page number in the citation, e.g., for APA (Møller et al., 2009, p. 22).
Creative thesis projects can take a variety of forms. Creative components of the project (e.g. visual art, film, theatric production, dance) are accompanied by a written thesis. The structure and specific sections of the thesis (abstract, introduction, literature review, discussion, conclusion, bibliography) should be approved by the student's faculty advisor and the Honors Council representative. The thesis should have a title page, as described in the preceding paragraphs (section II.1.10).

2. Defense Copy of the Thesis
The defense copy is the version of your thesis that you will defend to your committee. It should include any and all revisions you have made, as this is the copy that will determine your level of honors. **Your thesis advisor must read and approve your defense copy before you distribute it to your other honors thesis committee members.** You will submit a printed but unbound copy of this document to the College of Arts and Sciences Honors Program, and offer a copy (electronic or paper) to each member of your committee to read thoroughly prior to your defense (it is customary to send the thesis to committee members at least one week prior to the student's defense date). Be sure to check the Honors Program deadlines for when this copy is due to the Honors Program.

3. Final Copy of the Thesis
This copy will be submitted after your thesis defense (and includes any changes requested by your defense committee), but remember that any honors designation you earn is recommended by your defense committee based on your defense copy of your thesis. Upload the final copy of thesis to the Undergraduate Honors Theses repository on CU Scholar by the Honors Program deadline.

III. Honors Thesis Committee

1. Working with your advisor
Your advisor should be available for regular meetings with you, to answer questions and give you guidance about the proceedings of the content of your thesis. Your advisor should play a key role in the revisions of your thesis and give suggestions of studies you should read to expand and broaden your understanding of the research topic. Since one of the biggest problems for honors students is insufficient time allocated for the back-and-forth of thesis drafts between you and your advisor, you may want to include some extra time for this when creating your timeline (required when you register your thesis project). Submit drafts of portions of your thesis to your advisor regularly, and incorporate feedback from your advisor on the drafts in a thorough and timely manner.

2. Choosing your committee members
You should choose your committee and have their agreement to join your committee by the honors thesis registration deadline, when your registration form is due to the Honors Program. You also need to decide who will be your honors thesis advisor by this deadline, but it is much easier on you and your advisor if you have made this decision earlier. You need no fewer than three defense committee members: Your faculty advisor, one Honors Council representative from the Honors Program faculty (see http://www.colorado.edu/honors/people), and a third member.

You may find someone with whom you have taken a class you enjoyed, or you may explore faculty members with research interests similar to your project to find someone who can help
you pursue your research. In accordance with the interdisciplinary nature of your thesis, consider selecting faculty members for your committee who can help you with the different disciplines or topics your project addresses. Keep in mind that one or more committee members might not be familiar with one of your research areas, and that you’ll need to accommodate them in your oral defense and thesis writing by being transparent and defining all technical terms you use. You may choose to invite more than three committee members, but the more people you have on your committee the more difficult scheduling is, and the more questions you may get.

3. Communication with your committee
Be respectful and punctual through email correspondence with your committee. Early in the semester you will defend your thesis, schedule a time for your defense. Give a range of dates (e.g. the last two weeks of March) and ask your committee what general time of day or days of the week that would fit in their schedules. You may want to send out a Doodle poll (at doodle.com) to come up with the defense time. As the thesis defense gets closer, remind your committee of when and where your defense will be. Remember to send your final defense copy to each committee member 1-2 weeks prior to the defense. Offer several different versions of your thesis (.docx, PDF, printed hard copy) and remember to request comments from your committee; the additional critique will likely help your thesis be even better.

IV. Research and Writing

1. Developing a Research Question
Great research questions address gaps in the current literature, but are able to build on previous research. It is perfectly okay to follow the suggestion for a suitable research question/project from the advisor you choose, and later increasingly take “ownership” of the project as you conduct your research. In other cases, it may be appropriate for you to develop a research question more independently before starting the research. In that case, you should seek the feedback of your advisor on the feasibility of successfully pursuing your idea as an Honors project with its limited time frame. In either scenario, you should conduct several thorough literature searches (see the section below for more details), and pay attention to aspects of phenomena that you notice as needing further investigation. You might consider many potential research questions before deciding on one.

This process will help you ascertain where the gaps are in the current literature, which makes for a more interesting thesis topic. It will also help you articulate why an interdisciplinary approach to your topic is necessary. It usually takes quite a bit of reading to understand the “dialogue” that has been taking place in any sub-discipline, or between disciplines, but it may help to begin your search by looking in topics that interest you and pertain to your advisor’s work. Reading recently published papers (including reviews) or studying recent creative works will show you how phenomena are currently explored, but be sure to expand your reading frame to include classic work in your field(s), to understand how the scientific investigation or artistic exploration has developed through the years. You may find a topic and read extensively about it, and find that there are a number of questions that have not been addressed. Alternatively, you may consider a phenomenon and number of questions that haven’t yet been explored yet. The key to a good research question is that it attempts to describe and address a gap in the literature, but builds on previous research or creative work in a logical and creative way.
2. Literature Searches
Your literature searches may be one of the most important steps to crafting an interesting and novel study that will garner attention from your committee and the research community. After discussing possible projects with your advisor, utilize multiple online journal searches through databases (such as Web of Science, Google Scholar, and more databases located at http://www.colorado.edu/libraries/research/find-articles-and-databases) to find relevant peer-reviewed articles and books. For creative projects, explore many projects related to yours and research and writing about them. Meet with a librarian to find out how to perform the most effective search for literature relevant to your project. Be sure to continually comb the literature for related books, papers, and/or projects to add to your understanding of the topic, even after you have started your work. In your thesis, you must cite an appropriate number of references for your field(s), and they should be references that bolster your credibility as a scholar. Use both classic and newer studies to illustrate and authenticate your own research. All this will allow you to better understand your research area, grasp the meaning and importance of your own results, and compare your results with those of other authors.

3. Writing
Start as early as you can. Consider enrolling in the Advanced Honors Writing Workshop (HONR 3220) as early as your sophomore year (especially if you already have an idea for a thesis topic). Writing the thesis may seem daunting at first, because you are indeed starting a long process, but do not fear; the thesis should not be written in one sitting, but should be worked on over a longer period of time. You should begin by keeping notes and outlines of each book and article you read and creative work you examine. Keep notes and outlines of each section of your thesis (described above), especially of your methods, so that as you gain more information, you can then fill in your outlines with more detail. If you begin by building a logical structure of your study, with clear research questions and hypotheses, you will be able to identify those portions that “don’t fit” or where further thought to fill gaps is needed. Be sure to note all assumptions or premises of your arguments, as these are of particular interest of your committee; everything you do should have a well thought out reason. The thesis is not just a summary of what you have seen previously, but a novel piece of your own work and ideas – these will be developed through your drafts.

It is also important to note that your thesis is typically not written about what you originally set out to find, but to describe the results you actually obtained (rather than what you might have hoped to find!). In your introduction, formulate the question you actually answered. Every section should prepare the reader to understand and appreciate the results and conclusions you discovered. If you find a non-significant result where you had expected something significant, prepare your readers in the introduction (and throughout the thesis) for the possibility that there is another phenomenon acting on the system. Every section of the thesis should contribute to a single, unified presentation of the actual findings from your study as an answer to your research question and in relation to your thesis statement.

You may find that making one (or a series of) outline(s) helps you develop your ideas, a logical flow of those ideas, and thus a convincing argument. The thesis should tell one logical story, and everything in your thesis should support that story. Develop an outline of ideas that allows you to show this (that is, your outline should clearly show how one idea connects logically to the next one, and so on). Once you have your final outline, fill in sections in the order that you want. For example, it may be best to write your Methods section as you carry out the research, such that no important details are left out. Additionally, before writing the Results section, remember
that the goal of the thesis is to demonstrate one logical flow of information, and thus be sure to
take time to carefully order all of your figures, data, graphs, and tables before you start writing
this section. Graphic schemas or word maps can also help sort out the parts of your project and
how they support your main argument.

4. **Tips on Meeting Deadlines**
Spend time making an initial in-depth schedule when you begin the thesis writing process,
including the official deadlines from the Honors Program. Schedule personal deadlines with
goals well in advance of your thesis defense to allow a time buffer in case problems or “hitches”
are encountered, which occurs almost invariably. Try to meet with your advisor once a week, as
well as consider meeting the other honors thesis committee members, or the Writing Center in
Norlin Library to garner further feedback. The more feedback you are able to get, the better your
thesis will be. Write all your deadlines in a day planner at the beginning of the semester so you
know what’s due and when. You can revise these as needed as you go along.

V. Thesis Defense

1. **Purpose**
The oral defense of your written thesis allows you to demonstrate familiarity with specific and
broader aspects of your research area, and the ability to think critically and communicate
effectively. This is not simply an “overview” of your thesis, but an opportunity to show the “bigger
picture” into which your work fits, to engage in conversation about where your research could go,
and reflect on research that has been done previously.

2. **Guidelines and Formatting**
You should begin with a 10-15 minute synopsis of your thesis (typically using a slide show such
as a PowerPoint presentation). Introduce your study by giving a rationale of your work: why it
matters, how it is interdisciplinary, why you spent time researching this, what the bigger picture
is. You should then give a brief summary of the methods, results and the conclusions of the
study. Your methods should be described such that the audience can easily understand how
you are answering your research question. Discuss any pitfalls and limitations of your study,
constructively; don’t sell your research short, but be realistic. It is an excellent idea to practice
your defense presentation as much as possible. As you “talk it out,” it is easier to identify holes
in logic or reconstruct weak arguments, and doing this gives you more confidence when
presenting the “real thing.” You might even consider video recording yourself to confirm that you
are confident and composed while presenting; be familiar enough with your presentation that
you do not rely on slides or notes to give you the information.

3. **Defense Agenda**
You will set up your presentation, and greet committee members as they arrive. You will be
asked to leave the room for a few minutes at the beginning of the defense time. You will then
give your 10-15 minute presentation, and subsequently engage in a period of questions and
conversation about your presentation (expect conversation about tangentially related subjects,
as well). This may take another 20 to 45 minutes. You will then be asked to leave once again,
while the committee discusses, and after their discussion, you may return and pack up your
laptop and belongings. The committee members are not allowed to tell you what level of honors
they plan to recommend.
Be prepared to answer questions about the following items: (1) any and all aspects of your research, especially what is mentioned in your presentation, written on your slides, and in your written thesis, (2) background knowledge of the main issues (found in the body of literature and sometimes textbooks), (3) relevant literature (e.g., what was known by the research community when you started, how do your results fit into the “big picture”), (4) things you may do differently if you could perform your experiment/project over again, and (5) future plans with your career. Previous students suggested writing a list of specific possible questions that you can prepare to answer for your committee, so that no question takes you by complete surprise.

4. Scheduling the Defense
You are responsible for scheduling the defense with your committee members (as mentioned above) early in the semester, and booking a room. Work with your thesis advisor, Honors Council representative, and Honors Program staff to reserve a room. Reserve the room for one-and-a-half or two hours to give yourself and the committee ample time. Previous honors students recommend that you complete your defense before Spring Break (for Spring graduation), although you are free to schedule it any time before the Honors Program deadline.

VI. Honors Designations

1. How the decision is made
Your cumulative GPA suggests a specific honors designation (see Table 1, below), but the level of honors you earn is based on your cumulative GPA, the written thesis, and the thesis defense. Consequently, you might receive a level of honors higher or lower than that indicated by your GPA. For magna and summa level honors, both the defense and written thesis must demonstrate a clear command of the “big picture”, and the research should be conducted somewhat independently (especially for a Summa). For a Summa, the thesis and defense must be “impeccable.” Your committee will write a letter to the Honors Council recommending a particular level of honors, but the Honors Council has the final say on the level of honors awarded.

Table 1. Honors designations and corresponding cumulative GPAs

<table>
<thead>
<tr>
<th>Honors Level</th>
<th>Latin Honors</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors</td>
<td><em>cum laude</em></td>
<td>3.300-3.499</td>
</tr>
<tr>
<td>High Honors</td>
<td><em>magna cum laude</em></td>
<td>3.500-3.799</td>
</tr>
<tr>
<td>Highest Honors</td>
<td><em>summa cum laude</em></td>
<td>3.800-4.000</td>
</tr>
</tbody>
</table>

2. Honors Council
The Honors Council is a group of approximately 65 faculty members from the College of Arts and Sciences. The Honors Council makes the final decision on your honors designation. Their role is crucial when the thesis committee’s recommendation is not unanimous, or when the recommended designation is higher or lower than what the GPA suggests. In the latter cases, the defense copy of your thesis might be circulated and read by the Honors Council members.
SAMPLE TITLE PAGE

Thesis Title: Please Use the Capitalization Format Most Appropriate for Your Discipline  
(consult your thesis advisor for more information on this)

Your Name

General Honors

Defended on Month, Day Year

Committee:

Thesis Advisor: Dr. (Your Thesis Advisor), Department of (Their Department)  
Dr. (Honors Council Representative), College of Arts and Sciences Honors Program  
Dr. (Your Third Committee Member), Department of (Their Department)