Honors Thesis: UO Environmental Studies Program Overview and Frequently Asked Questions

September 2024

A. Overview

Students majoring in Environmental Studies (ENVS) and Environmental Science (ESCI) are encouraged to participate in the Environmental Studies Program honors program. Conducting original research and writing a thesis allows you to develop your critical thinking and writing skills, so it is good preparation for future professional positions and graduate studies. Graduating with honors demonstrates a high level of initiative and ability to work independently. Also, an honors thesis is a way to become an expert on a topic of interest and gain recognition for your outstanding academic work.

To graduate with honors in the Environmental Studies Program, a student must:

- 1. Have a 3.3 overall GPA and a 3.5 GPA in classes required for the major.
- Complete a research-based thesis or creative project conducted under the direction of a faculty adviser. Due to the breadth of potential research topics, students can do original laboratory or field-based research, library-based research, or a creative project.

In summary, our requirements are:

- 1. Meet with your Tykeson Academic and Career Advisor to discuss how the credits might fulfill major requirements and brainstorm potential faculty thesis advisors if needed.
 - ➤ We also recommend talking to an adviser with the <u>Center for Undergraduate</u> <u>Research and Engagement</u> to talk about potential research opportunities.
- 2. Secure a faculty adviser who will oversee your work.
- 3. Email Kate Schau, Environmental Studies Program Undergraduate Coordinator (<u>undergradasu7@uoregon.edu</u>), to inform the Environmental Studies Program of your plans and to have your topic approved.
- 4. Complete your prospectus (this may be done before or during ENVS 401).
- 5. Take ENVS 401: Research (4 credits) (not required for Clark Honors College students).
- 6. Take ENVS 403: Thesis (4 credits).
- 7. Give a public oral presentation (defense).
- 8. Complete thesis cover page with faculty adviser signature indicating final approval.
- 9. <u>Upload</u> your approved thesis as a PDF to Scholar's Bank before the end of finals week, and email ENVS to confirm that you have done so. (Once posted, your thesis will be permanently accessible, available and searchable through the UO libraries.)

See the next page for a more detailed description of these requirements.

B. Timeline

Most students complete their research and writing during their senior year. However, the timeline is flexible if you are conducting research during the summer. Here is a typical schedule:

Fall Quarter

- a. Determine your topic or area of interest.
- b. Meet with your Tykeson Academic and Career Adviser.
- c. Identify and secure your faculty adviser.
 - If you are conducting research that involves either people or animals, talk with your faculty advisor to determine if you need to submit your project for review from the UO Institutional Review Board (IRB) or the UO Institutional Animal Care and Use Committee. If so, obtain UO approval *before* you begin your research.
- d. Email Kate Schau for approval from the Environmental Studies Program.
- e. Optional: start working on your prospectus.

Winter Quarter

- a. Register for 4 credits of research (ENVS 401).
- b. Complete prospectus and submit to your faculty adviser.
- c. Complete research.

Spring Quarter

- a. Register for 4 credits of thesis (ENVS 403).
- b. Make arrangements for oral presentation.
- c. If required for your project, submit IRB closure form.
- d. Finalize and submit approved thesis to ENVS.

C. Description of Requirements

Determine your topic: 1. Meet with your Tykeson adviser, 2. Secure a faculty adviser, and 3. Email Kate Schau.

Your topic must be environmentally related and interdisciplinary. In other words, you should look at an environmental topic from more than one perspective. For example:

- If you are examining international policies that address climate change, you could include a short discussion of climate science.
- If you are researching the ecology of an endangered species, you could discuss management implications of your findings.

Students enrolled in Clark Honors College (CHC) may complete a single thesis for both CHC and ENVS as long as the content is environmentally focused. Similarly, students who are double majors can complete a single thesis for both majors if it meets Environmental Studies Programs requirements and if it is allowed by the other department.

You will ask a faculty member who has expertise in your topic to serve as your mentor/adviser. Some students work in a professor's laboratory, conducting their honors research within the framework of the laboratory's work. Other students conduct their own independent research under the guidance of a faculty adviser. Some students complete honors theses linked to their study abroad courses, research-related internships or Environmental Leadership Program projects.

4. Complete your prospectus

In order to become familiar with the literature and articulate your intended methods, you need to write a 6-8 page prospectus (double-spaced except for bibliography section). The purpose of the prospectus is to ensure that students have done appropriate background work to be successful in the research phase. Depending on the nature of your research, you may wish to complete this step either just prior to taking ENVS 401 (e.g., if you are doing summer field work) or while you are taking ENVS 401 (e.g., as your first assignment). You will submit your prospectus to your faculty adviser, so we recommend that you check in with them to determine the best approach.

The first step is to conduct a literature search to 1) become familiar with what is known and not known about your topic, 2) write your prospectus introduction, 3) refine your methods, and 4) find literature that might be helpful as you write your thesis. We recommend a minimum of 15 high-quality, peer-reviewed sources. The UO Libraries website has great information on conducting research, advice on environmentally-related literature databases and links to free literature management software (e.g., Zotero and Mendeley).

Although the prospectus structure may vary by discipline and topic, we recommend the following outline. However, you may include different content as approved by your faculty adviser.

- 1) Introduction The introduction should summarize essential background so the reader can understand the context, purpose and methods for the thesis. The introduction should synthesize and cite literature in the bibliography.
- 2) Research questions or project goal Summarize what hypotheses you plan on testing, what questions you hope to answer or for creative projects what goals you hope to achieve.
- 3) Methods What specific methods will you use to answer those questions or achieve those goals?
- 4) *(Optional)* Preliminary Outline or Product What will your thesis or project eventually look like? What sections will it have?
- 5) Timeline When will you conduct your research and complete your thesis? Include all benchmarks and check-in points (in other words, work with your faculty adviser to create agreed-upon deadlines).
- 6) Bibliography Include a list of resources that you have consulted or that may be of use to you as you conduct your research.

You will submit your prospectus to your faculty adviser for feedback. You are not required to submit it to the Environmental Studies Program.

5. and 6. Take ENVS 401 Research (4 credits) and ENVS 403 Thesis (4 credits)

For ENVS honors students not in Clark Honors College, we require that you take 4 credits each of ENVS 401 (research) and ENVS 403 (thesis). You will work with your Tykeson Academic and Career Advisor to determine how these credits might count towards your major requirements, depending on the topic. Follow their instructions for petitioning to the Environmental Studies Program for exceptions to the major requirements.

CHC students may substitute HC 477 Thesis Prospectus for the ENVS 401 requirement but need to register for ENVS 403.

These credits ensure that students have time in their schedules to dedicate to research and writing. The expectation is that you will spend approximately 12 hours per week working on researching, then writing, your thesis. Your faculty adviser serves as the instructor of record and determines what a passing grade constitutes (ENVS 401/403 credits are always P/N). Example assignments might include short updates, data summaries, preliminary analysis, detailed thesis outline, draft thesis, etc.

To be approved to register for ENVS 401 and 403, your instructor will submit a Student Individualized Study Course form on your behalf. Confirm that they have your name, student ID number, UO email address, and the correct number of credits (4 in most cases). You will be notified when you are cleared to register.

We do not have any formatting requirements for your completed thesis other than a cover (title) page and approval (abstract) page signed by your faculty adviser. The ENVS Honors Cover and Approval Pages templates are available on the <u>ENVS honors website</u>. Clark's Honors College students will follow CHC cover page and formatting requirements.

Students often want to know how long a thesis should be. Because the typical page number varies by topic and discipline, we do not have an official minimum or maximum number of required pages. An honors thesis represents a shift to professional writing: away from "how long is the assignment" to "what information is needed to answer the central question(s) of my work." We recommend that you look at past undergraduate theses to see how other students have written about their topics (see Scholar's Bank).

7. Give a public oral presentation (defense)

You will give a public presentation summarizing your work. Your faculty adviser must be present, and you may invite anyone else. Student presentations are usually 20-30 min with an additional 20-30 min of questions. Your faculty adviser will introduce you and lead the

question-and-answer session. CHC students may count their CHC thesis defense for this requirement by inviting the ENVS community to attend their presentation.

Please schedule your presentation to occur before the end of week 10 of the term you are finishing your thesis. It is up to you to schedule a time and secure a room. If you wish, you can work with Kate Schau to reserve 249 COL. We recommend that you reserve the room for a total of 1.5-2 hours (0.5-1 hour to set up and practice, then 1 hour for your presentation session including Q&A). A few minutes before your room reservation time, go to 144 COL and ask ENVS staff to assist you with unlocking the door and connecting to a display. You are not required to use 249 COL and you may secure your own room on campus.

At least one week before your presentation, send Kate Schau a flier announcing your presentation for advertising to the Environmental Studies community. The flier should include your name, thesis title, and date, time and location of your presentation. *Note:* even though we will advertise your presentation, it is your responsibility to build your audience. Consider inviting your friends, family and anyone who has assisted you with your work!

8. Obtain approval from your faculty adviser, and 9. Upload your approved thesis to Scholar's Bank and inform ENVS.

Once your faculty adviser has approved your thesis, ask them to sign the approval page (available on the <u>ENVS honors webpage</u>). Append this signed page to the beginning of your thesis.

Lastly, <u>submit</u> your approved thesis in PDF format to Scholar's Bank by the end of finals week of the term you are graduating. Please submit a single document that includes the cover and signed approval pages. If you are in CHC, follow CHC instructions for thesis submission.

Email confirmation of your submission to Kate Schau (<u>undergradasu7@uoregon.edu</u>) and attach a copy of your finalized document. **You MUST confirm your submission with ENVS to be approved for departmental honors.**

D. Other Opportunities

You can explore advising, grants and other opportunities through the <u>UO's Center for Undergraduate Research and Engagement</u> and <u>UO's Undergraduate Research Opportunity Program</u>.

Consider sharing your findings with a broader audience!

- 1. <u>UO Undergraduate Symposium</u> You can give a presentation or show a poster at this annual event celebrating undergraduate research and creative work.
- 2. <u>Oregon Undergraduate Research Journal</u> You can gain experience with the peer-review process and publish your findings through this undergraduate-led journal,

E. Frequently Asked Questions

Q: Do I need a second reader?

A: No, ENVS honors students who are not enrolled in CHC do not need a second reader nor a committee, only one faculty adviser. CHC students must follow CHC requirements.

Q: Do I need to get any paperwork for my faculty adviser to fill out during/after the presentation?

A: You simply need an approval page (available on the ENVS honors website) signed by your faculty adviser. Append your signed approval page to your thesis for final submission to Scholar's Bank and the Environmental Studies Program.

Q: Are there particular formatting requirements? Similarly: Are there requirements for the abstract page and cover page aside from them being signed by our faculty advisor (e.g., formatting, length of abstract, etc.?).

A: Other than the required cover and signed approval pages, we do not have a set of prescriptive formatting guidelines because our students can work with faculty members from many disciplines. Therefore, we count upon the faculty adviser to uphold disciplinary standards. However, ESCI majors presenting research findings can expect to follow a standard scientific paper format: Abstract, Table of Contents, List of Figures and Tables, Introduction, Methods, Results, Discussion, and Literature Cited. You may also wish to add an Acknowledgements section. There is no official length on abstracts but a common limit for scientific journals is no longer than 300 words. A thesis is typically double-spaced.

Q: In the instructions online, it says the defense is due by week 10 and the thesis needs to be submitted by the end of finals week. Does this mean the thesis can be turned in after the defense?

A: Yes, it is typical to submit the thesis after the defense. This allows you to incorporate any important feedback from the defense.

Q: May I present at the Undergraduate Research Symposium in lieu of a defense?

A: Yes, you may substitute a URS presentation for the defense requirement if agreed upon by both you and your faculty adviser.

Q: Do I have to collect my own data?

A: No, a thesis can consist of library research or creative work. For projects in the natural science disciplines, the ability to collect original data is valuable, but we leave the amount and type of data to the discretion of the student and faculty adviser.

Q: What if my results aren't significant?

A: Results don't have to be "positive" to be meaningful, as you can learn just as much from non-significant results. In fact, negative results may require you to apply important critical thinking skills.

Q: Can I count research and/or thesis credits from another department for the ENVS 401/403 requirement?

Yes, if you take the required number of credits. Talk to your Tykeson adviser and follow their instructions for petitioning for an exception to the Environmental Studies Program.

Q: Is there a special graduation cord for students graduating with honors?

Yes. Each spring, the ENVS Undergraduate Coordinator sends out emails with commencement information. The emails will have instructions for requesting a cord.