

Guidelines for Undergraduate Honors Research in ENVR- ENHS

OVERVIEW

An Honors research project provides Undergraduate Students with the opportunity to plan and carry out research designed to answer a specific research question, under the guidance of a faculty [Research Advisor](#). Participation in Honors research requires a minimum Grade Point Average of 3.2 at all times (3.3 if graduating in May 2015 or later). Your findings are written up in the form of a Senior Honors Thesis, and defended in a public seminar (Honors Defense). The Thesis and Defense are evaluated by your [Undergraduate Honors Committee](#). The ENHS Director of Undergraduate Studies (currently Dr. Ball) serves as overall Departmental Honors Advisor.

Students who successfully complete a senior honors thesis project will have the designation 'Honors' or 'Highest Honors' printed beside their names in the Commencement bulletins and recorded on their diplomas and transcripts. [Source: [Senior Honors Thesis Guidelines for Academic Units, Faculty Advisors, and Students](#)]

SELECTION OF RESEARCH ADVISOR

Your Research Advisor is the Faculty Member who agrees to host you in her/his laboratory and who ultimately oversees your research. The Research Advisor is usually (though not necessarily) a member of the Department of Environmental Sciences and Engineering (ESE). One good way to find a Research Advisor is to identify areas of research that you are interested in, then seek out individuals working in those areas. Feel free to talk to other students in ENHS about the labs where they are carrying out research. The [Office of Undergraduate Research](#) maintains a searchable data-base of [Undergraduate Research Opportunities](#). The ESE Student Services Office will periodically circulate information about specific research opportunities. Initiate contact with potential Advisors by email (or as specified in the position advertisement), then follow up in person (make appointment). Your Research Advisor may assign a senior graduate student or postdoc as your day-to-day supervisor, but should be available for career and academic advice, as well as overseeing your research. Think long-term: your Research Advisor is also a potential reference for Graduate School or employment opportunities, and a sponsor for the Plus1 Masters program.

COMMITTEE

Your Undergraduate Honors Committee is composed of your Research Advisor, one other faculty member from the Department of Environmental Sciences and Engineering, and a third member who can be a faculty member, a postdoctoral fellow/associate, or a senior graduate student, who has been closely involved in your research. You should start thinking about identifying potential committee members as your research takes shape, and you should formally form your committee by the mid-semester break of the semester in which you will be defending your Honors Thesis.

OPPORTUNITIES FOR FUNDING:

Undergraduates have opportunities to apply to HonorsCarolina for small grants (up to \$ 500, usually) to purchase supplies or needed services for their Honors Research Projects. Award of

such a grant looks good on your Resume. A call for applications goes out both Fall and Spring semesters, usually in January or early September, with a deadline of late January or late September. For more information see:

<http://honorscarolina.unc.edu/current-students/honors-thesis-and-undergraduate-research/honors-thesis-research-grants/>

Summer research can be supported by [Honors Mentored Research Fellowships](#), through the UNC-CH [Office of Undergraduate Research](#).

REGISTERING FOR ENVR691H -ENVR692H

Normally you would register for ENVR691H (Honors Research) in the Fall of your Senior year and ENVR692H (Honors Thesis) in the Spring - i.e. the final semester before your May graduation. (If a December graduate, adjust semesters accordingly).

ENVR691H and 692H are set up as three-credit courses with different section numbers reflecting the different faculty members available to serve as Research Advisors. Currently ConnectCarolina offers the lowest section number as the default. You will need to click around to get a drop-down menu with a choice of section numbers, from which you should choose the appropriate one. If your chosen Research Advisor is not listed then see the Student Services Office (Mr. Whaley) or Dr. Ball for help. Also, after you have registered, go back and check that ConnectCarolina is showing the desired credits/section. If these are incorrect and it's before the end of drop-add, you should be able to fix this yourself by dropping and re-registering. If it's after Drop/Add or you're having trouble, see the Student Services Office (Mr. Whaley) for help.

TIME-LINE (FOR MAY GRADUATION) (For December Graduation the deadline for defending is usually in the week before Thanksgiving - adjust your time-frame accordingly).

End of January: Lab work should be just about finished - maybe a few loose ends to tie up.

Middle of February: First draft of Thesis to Research Advisor.

Mid-February - Mid March: Work with Research Advisor to edit/revise Thesis until it is ready for Prime Time.

Mid-March:

- Form Committee
- Schedule day and time for Defense - this will involve (probably extensive) negotiation with your committee.
- Book room for Defense - book room for 2 hours (Online request: <http://sph.unc.edu/resources/rooms/>). Look at both classrooms and conference spaces. Consider the size of the potential audience that might attend : lab-mates, friends, room-mates, BSPH cohort. Also book computer and projector if these are not permanently installed in your selected room.

~3rd Week in March (two weeks-10 days before defense) :

- Circulate Final Draft of Thesis to Committee.
- Double-check that day/time/room scheduled are still OK.
- Email the ENVR Student Services Office (Mr. Jack Whaley - Mr Wake Harper) with
 - Your defense day, time, room
 - Title of your Honors Thesis
 - Abstract of your Thesis
 - Graphic to be included in your Defense announcement (optional)
 - Names of your Research Advisor and Committee Members

Last week in March: Prepare your presentation (usually Powerpoint or similar)

First Week in April (before Honors reporting deadline - Monday April 14th 2014 for May graduation and Monday, November 17, 2014 for December graduation): Defend Thesis

Second-Third Week in April: Make final revisions to Thesis

By Last Day of Classes: Turn in final “perfect” .pdf files of Title Page and Thesis to the Carolina Digital Repository (<https://cdr.lib.unc.edu/forms/honors-thesis.form>) and two bound hard copies of Thesis to the Student Services Office.

FORMAT OF THE HONORS THESIS

Length 20 ~ 30 pages double spaced, 12pt, plus appendix if appropriate.

Two bound (in Acco binder) copies of the final Thesis (after all revisions requested by the Committee have been completed) should be turned in to the Student Services Office. One bound copy is retained in the Department files, the other goes to the student’s Research Advisor.

The ENHS Honors Thesis includes the following components:

Title Page see [model](#)

Abstract 150 to 200 words

Acknowledgments both personal and institutional e.g. funding

Table of Contents

List of Tables (if more than ~ 3 are included)

List of Figures (if more than ~ 3 are included)

Introduction

Materials and Methods

Results

Discussion/Conclusions

References.

Appendix if appropriate

HONORS DEFENSE

The Honors Defense is a public seminar in which you will present the results of your research, using visual aids (e.g. Powerpoint) as appropriate. In 30-40 minutes, introduce your Specific Aim(s), describe the Background and context of your research, your experimental design (and hypothesis if appropriate), your experiments and the results that you obtained. Finish with a discussion of the significance of your findings, and the implications for Environmental Health. The general audience will then have the opportunity to ask questions. After the open questions (and possibly a short break, and/or private discussion among the committee), the committee will meet in closed session with the candidate to ask more detailed questions about the research, the presentation and interpretation of the results, the conclusions, and potentially any other material that a student graduating from ENHS could reasonably be expected to know. At the conclusion of the closed session the candidate will be excused while the committee confer among themselves to evaluate the Thesis and the Defense.

GRADING

At the conclusion of the Defense, the student will be judged to have Passed, Passed with Honors, or Passed with Highest Honors.

Pass: The Thesis and its defense are acceptable.

Honors: The Thesis and its defense are excellent.

Highest Honors: The Thesis and its defense are outstanding, comparable in calibre and quality to a good Masters's degree candidate.

Grading will be based on both the Thesis and the oral presentation. The Thesis will be evaluated on clarity and logic of general writing, articulation of goals, clarity of presentation of results, interpretation of results, discussion of significance, and appropriate placement into context. The Oral Presentation will be evaluated on organization, clarity, appropriateness of visual aids, and the candidate's handling of questions both from the general audience and from the Committee.

AFTER THE DEFENSE

The Committee will make recommendations for revisions of the Thesis. The final revised version should be signed on the cover page by the Committee members to signify their approval of the final revised version. Two bound (in Acco binder) copies of the final Thesis (after all revisions requested by the Committee have been completed) should be turned in to the Student Services Office and a .pdf file of the final Thesis should be uploaded to the Carolina Digital Repository.

ELECTRONIC SUBMISSION OF THESIS (Copied from [Senior Honors Thesis Guidelines for Academic Units, Faculty Advisors, and Students](#))

Students will submit their theses electronically via the Carolina Digital Repository (CDR). Submissions are due by the last day of class in the semester in which students complete their theses. The University Library will catalog electronic theses and make them available to the

public.

Students should follow these steps to submit their completed thesis to the CDR:

1. Log in to <https://cdr.lib.unc.edu/forms/honors-thesis.form> using Onyen.

2. Complete required fields and upload documents:

“Degree granted” will be Bachelor of Science in Public Health (from drop-down menu).

“Major/minor” will be Environmental Health Sciences.

REQUIRED DOCUMENT #1-A scanned copy of their thesis cover page only, signed by the thesis advisor, in pdf format using the following naming convention:

“GraduationYear_LastName_Cover.pdf” (ex. 2013_Clemmons_Cover.pdf)

REQUIRED DOCUMENT #2-The thesis in PDF format using the following naming convention:

“GraduationYear_LastName.pdf” (ex. 2013_Clemmons.pdf)

OPTIONAL DOCUMENTS–Additional supplemental files in PDF format using the this naming convention:

GraduationYear_LastName_SupplementalFileNumber.pdf”

(example: 2013_Clemmons_2.pdf)

Students who have supplemental files larger than 500MB should contact the CDR staff at cdr@unc.edu to arrange an alternative file transfer method.

3. Click “Submit Deposit”

Each student’s thesis will be held in the CDR until that student’s graduation date, when Honors Carolina will clear the thesis for online publication. Once published, theses will be publicly accessible via the Carolina Digital Repository website.

Students may request a one-or two- year delayed release of their work via the CDR.

Such requests must be submitted in writing to

honorscarolina@unc.edu

before the last day of class in the semester of submission

LMB 27 March 2014

Title

Your name

Honors Thesis ENHS
Department of Environmental Sciences and Engineering
Gillings School of Global Public Health
The University of North Carolina at Chapel Hill
Month, Year

Approved:

Dr. [Advisor's Name] (Advisor)
[Affiliation if not ESE]

Dr. [ESE Faculty Member's Name] (Reader)

Dr. [ESE Faculty Member's Name] (Reader)
[Affiliation if not ESE]