

SENIOR THESIS HANDBOOK
for candidates for the
HONORS DEGREE WITH DISTINCTION
and
DEGREE WITH DISTINCTION

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by the
Board of Senior Thesis Readers
and the
Undergraduate Research Program

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WHAT IS A SENIOR THESIS?

A Senior Thesis is a paper which highly-motivated senior undergraduates may write to present the results of a major independent research or creative project. Unlike most term projects, papers, and lab reports written in undergraduate courses, a Senior Thesis addresses questions or issues for which no known or generally accepted answers exist.

The Senior Thesis Program allows you to explore your aptitude for research within a more extended and individualized framework than is generally available in your other courses. It provides close contact with scholars in your field, through your relationship with your Thesis Director and committee members, other interested faculty, graduate and postdoctoral students, and fellow undergraduate researchers. A Senior Thesis demonstrates your initiative, self-discipline, and achievement to graduate schools, fellowship committees, and employers. As the capstone of your undergraduate experience, a Senior Thesis provides you with the opportunity to draw upon everything you have learned in your college experience and make a significant contribution of your own.

Senior Thesis writers must think independently and creatively in order to successfully design and carry out the exploration of their hypotheses. They must exercise good judgment in analyzing the results of their experimentation or work with primary materials, and they must bring together a synthesis of existing information and theory to bear on their own experimental, analytical, or creative results.

The length of a Senior Thesis varies according to the discipline for which it is prepared:

- Humanities or social science theses are typically 50 pages long; however, they have been known to range to 200-300 pages;
- Quantitative sciences and engineering theses are typically shorter;
- Fine and performing arts theses take the form of portfolios or performances, with brief supporting written materials.

It is important to review a number of theses in your own and related disciplines before beginning a Senior Thesis project, as this review will give you a good sense of the scope of a Senior Thesis project in your area. Sample theses are available online through the University's institutional repository (<http://dspace.udel.edu:8080/dspace/handle/19716/4234>). Additional examples are available at the Office of Undergraduate Research and Experiential Learning (180 South College Ave) and at the University Archives, Room 002, Pearson Hall basement. Master's theses also provide good models and can be found at the University Library.

STUDENTS WITH DOUBLE MAJORS, OR WHO WANT TO WRITE A THESIS OUTSIDE THEIR MAJOR

Though many students have double majors, the nature of research normally demands that you choose one major in which to attempt the thesis, unless you are planning a fifth year to complete the second thesis. **Students who are considering completing two theses must schedule an appointment** with Lauren Barsky, (lbarsky@udel.edu) or Victoria Sunnergren (vsunner@udel.edu) to discuss their plans.

If you wish to do a Senior Thesis for Distinction in a field other than your major, you **must request the permission of the Board of Senior Thesis Readers**. Before requesting the Board's permission, please schedule an appointment with Lauren Barsky (lbarsky@udel.edu) to discuss your plans.

WHAT IS A DEGREE WITH DISTINCTION?

Upon successfully researching, writing, and defending a Senior Thesis, you will graduate with one of two degrees: The Degree with Distinction (DWD) or the Honors Degree with Distinction (HDWD), the differences and requirements of which are described in subsequent sections. The term “Distinction” is included in a baccalaureate degree title when the recipient has conducted original research or creative work, written a Senior Thesis or produced a creative project and successfully defended the work before a committee of University faculty. The University of Delaware offers Degrees with Distinction (DWD) to students who successfully defend a Senior Thesis and who meet all of the requirements listed below. To graduate with Distinction is to graduate with a different kind of degree (e.g., a Bachelor of Arts in Anthropology with Distinction). Students who wish to write a thesis but who may not meet the requirements for a Degree with Distinction are also highly encouraged to complete a Senior Thesis.

For Honors students who successfully create and defend a Senior Thesis, it is possible to graduate with an Honors Degree with Distinction (HDWD). The HDWD recognizes a student's completion of the research requirements for the Degree with Distinction in addition to the successful completion of 30 credits in Honors courses through the degree program. The Honors Degree with Distinction is listed on each student's University of Delaware official transcript. All requirements for the HDWD are also listed below.

Requirements for Distinction

Requirements for the Degree with Distinction (DWD)

In addition to preparing a thesis that demonstrates synthesis, judgment, creativity, and independent thinking, a candidate for the DWD must meet the following requirements:

- University of Delaware cumulative grade point index of at least 3.0 at the time of graduation.
- Grade point index in the major of at least 3.5. At the request of the candidate, and with permission of the major department, Senior Thesis credits can be computed toward the major index.
- Registered for UNIV 401-000 and UNIV 402-000 in successive semesters.
- Attended all class meetings and met all required deadlines.
- Completed six (6) credits of thesis or project work during their final two (2) semesters and gave a formal oral presentation and defense of the thesis to all of their committee members.

Requirements for the Honors Degree with Distinction (HDWD)

In addition to preparing a thesis that demonstrates synthesis, judgment, creativity, and independent thinking, a candidate for the HDWD must meet the following requirements:

- University of Delaware cumulative grade-point index of at least 3.400 at the time of graduation.
- Six credits of Honors thesis or project (UNIV 401-080 and UNIV 402-080) and the successful oral presentation and defense of an acceptable thesis or project to a committee of faculty approved by the major department and the University Honors Program.
- Completion of any additional specifications for the thesis or project set by the major department.
- Honors coursework counting towards the Honors Degree with Distinction cannot be taken Pass-Fail unless the course is only offered as Pass-Fail.
- Six (6) credits of Honors thesis may be counted as part of the thirty (30) Honors credits required for the Honors Degree.
- If taken for three (3) credits, UNIV 402 satisfies the senior capstone requirement.
- The Honors Degree Application Form must be submitted to the University Honors Program by May 15 of the junior year for those graduating in the spring, and by November 15 for fall/winter graduates i.e., **the year before the year in which the candidate will graduate.**

PROGRAM ADMINISTRATION

The Honors Degree with Distinction and the Degree with Distinction are administered by the Board of Senior Thesis Readers. These are faculty who conduct the Senior Thesis course, UNIV 401/402, and who serve as third readers for senior theses candidates. The Board of Senior Thesis Readers administers policy concerning senior theses on behalf of the University Honors Program and the University Committee on Student and Faculty Honors (UCSFH). Board members for the year are listed below:

2017-2018 Board of Senior Thesis Readers

Amy Biddle, Agriculture and Natural Resources
Anna Klintsova, Psychology and Brain Sciences
Avron Abraham, Behavioral Health and Nutrition
Barbara Settles, Human Development and Family Studies
Bill Lewis, Education
Carlton Cooper, Biological Sciences
Chris Kloxin, Material Sciences
Daniel Stevens, Music
Elizabeth Orsega Smith, Behavioral Health and Nutrition
Gary Laverty, Biological Sciences
Jaclyn Schwarz, Psychology and Brain Sciences
Jeff Rosen, Psychology and Brain Sciences
John Montano, History
Kali Kniel, Animal and Food Sciences
Laura Eisenman, Education
Lindsay Hoffman, Communication
Lynnette Overby, Theatre
Mark Parcels, Animal and Food Sciences
Matt Decamp, Physics
Meryl Gardner, Business Administration
Philip Gentry, Music
Rolf Joerger, Animal and Food Sciences
Sebastian Cioaba, Math
Sue Groh, Chemistry and Biochemistry
Sue McNeil, Civil Engineering
Ted Davis, Political Science
Zubaer Hossain, Mechanical Engineering

The Undergraduate Research Program Staff

The Undergraduate Research Program staff members assist the Board of Senior Thesis Readers by coordinating activities and providing advisement to thesis candidates:

- Iain Crawford, Faculty Director of Undergraduate Research (icrawf@udel.edu)
- Lauren Barsky, Associate Director, Undergraduate Research Program (lbarsky@udel.edu)
- Victoria Sunnergren, Undergraduate Research Graduate Assistant (vsunner@udel.edu)

YOUR SENIOR THESIS COMMITTEE

- All work pertaining to your Senior Thesis will be conducted under the guidance and advice of three (3) faculty members who will make up your Thesis Committee.
- Only faculty members at the University of Delaware can serve as First and Second readers on your thesis committee, though you may receive help and advice from graduate students, faculty at other universities, and other individuals.
- It is possible to have more than three (3) members on your committee: non-faculty with appropriate research expertise can serve as co-directors or additional readers at the discretion of the candidate's major department.
- You will be working most closely with your Thesis Director, but you will also receive input from your second and third readers.
- **You will need to select your Thesis Director and second reader *before* you submit your application.**
- Your third reader will be assigned for you upon acceptance to the program.

Your Thesis Director

Your Thesis Director (also known as your thesis advisor or first reader) will oversee your project from its inception to its final form and will be your primary resource person for matters of substance, organization, and presentation. Your selection of a Thesis Director is an important one, perhaps as important as your choice of the topic itself, and the decision must be made prior to submitting your application (usually during your junior year). In making a decision, consider both a professor's expertise and his/her interest in your research topic.

Your Thesis Director's general responsibilities include

- Steering you to a topic that will involve original research and readings that are current, seminal, and representative of your topic;
- Helping you to obtain necessary supplies and equipment;
- Providing training in needed techniques;
- Providing continuous guidance with procedures and the research schedule to ensure the quality and timely completion of your project.

Additional specific responsibilities include

- Maintaining familiarity with the Senior Thesis program requirements and attending the orientation meeting for new directors of senior theses;
- Working with you to develop a proposal;
- Obtaining approval from the Human Subjects Review Board (if using human subjects);
- Helping you to select your second reader;
- Being present on campus while you complete your thesis;
- Arranging with you an appropriate number of contact hours per week while you are enrolled in UNIV-401 and UNIV-402;
- Reviewing and commenting on your regularly written progress reports and drafts of the thesis;
- Acting as moderator for the oral defense of the thesis;
- Submitting an "S" grade at the end of the first semester;
- Submitting final grades for both UNIV-401 and UNIV-402 after the defense of the thesis.

Co-Directors

It is possible for a team of two faculty members to jointly direct a thesis. If your thesis does have co-directors, you will still need to select another faculty member to serve as “second” reader. In this case, your thesis committee will have four members.

Your Second Reader

The second reader is usually a member of your major department with research expertise in the area of your thesis. This reader is selected by you in consultation with your Thesis Director and must be chosen before you submit your Senior Thesis proposal (usually during your Junior year).

Your second reader should offer comments as you revise your proposal early in the fall semester and will then approve it. Your second reader will also review and approve your written progress report. You should submit a draft of each chapter of the thesis as you write it during the winter and spring terms. This way, you can take the second reader’s suggestions for revision into account during your research process. Finally, the second reader will read a final draft of the thesis, prepare questions and attend the defense.

Your Third Reader

The third reader is someone who represents the University at large, selected from the members of the Board of Senior Thesis Readers, who is not a member of the thesis writer’s major department, and is not ordinarily an expert in the research field of the thesis. **You do not choose a third reader: instead, one will be selected for you after you are accepted to the program.**

Each Board member serves as third reader for 3-5 thesis candidates who meet as a group twice each semester with their third reader to discuss on-going research. Your third reader will also review and approve your proposal and progress report. Finally, the third reader will read a final draft of the thesis, prepare questions, attend the defense, and fill out and submit the Third Reader Defense Report Form to the Undergraduate Research Program.

HOW TO PREPARE BEFORE SENIOR YEAR

Preparation for your Senior Thesis can begin in your sophomore year as you explore potential topics of interest through course papers and individual reading, research skills courses (if offered in your major department), and/or through undergraduate research with a faculty mentor. This early start will enable you to select courses in your junior and senior years which are related to your research needs. To survey the research interests of faculty in your department, consult the Undergraduate Research Program website (<http://urp.udel.edu>), where there is a list of “Faculty Projects” under the “Research Opportunities” menu. You can also receive general advisement and referral to faculty by visiting the Undergraduate Research Office (URP) at 180 South College Avenue, by calling (302) 831-8995, or by emailing undergradresearch@udel.edu.

Junior Year Requirements

First semester – Junior year

- Identify a research topic
- Find a faculty member to direct your thesis. With the help of a committed sponsor, you will be able to establish a viable topic and potential methodologies for exploring it. **(Required)**.
- Make an appointment to see an advisor at the URP to discuss Senior Thesis requirements and processes, as well as to receive an application and proposal materials.

Second semester – Junior year

- Identify your second reader and write your “Senior Thesis Proposal,” due May 15 of the Junior year for spring graduates, and November 15 for fall/winter graduates. **(Required)**.
- Your Thesis Director will recommend background work for you to begin before the fall of your senior year.
- If your research involves experimentation, you may want to remain on campus during the summer to begin the experimental work or to continue experimentation you have begun in a Junior year research apprenticeship.
- Attend the Celebration of Undergraduate Engaged Scholarship event at the beginning of May, where seniors will be presenting summaries of their thesis work. **(Required)**.
- You may also attend third reader group presentations of students in your department in the spring of your junior year. Please contact the URP to request the times and locations of relevant third reader group presentations.

Summer between Junior and Senior year

This is a good time to do background work, literature reviews, experimentation, etc. If you will work on your project over the summer, you should consider applying for Summer Scholars or Summer Fellows, through the Undergraduate Research Program. More information can be found on the URP website.

Planning Your Senior Year

Because you are conducting original research, you must anticipate equipment failures, delays in obtaining needed literature and other supplies, and inconclusive results requiring new or additional experimentation. Thus, you should begin with, and regularly update, a clearly defined work schedule. You will spend most of your time working on your thesis either alone or with your Thesis Director, and you will want to meet with your Thesis Director about once a week, and occasionally meet with your Second Reader. Be prepared to spend approximately 10-20 hours a week working on your thesis.

If your project involves experimentation, plan to complete the experiments in the first semester of your senior year, leaving yourself time to retest over the Winter Session or early Spring semester if it becomes necessary.

If your project is very demanding of literary resources, try to complete the bulk of your reading and assembling of information in the fall, leaving time in the winter and early spring terms for working out your analysis and writing the paper.

All candidates should plan to get a considerable amount of thesis work done over the Winter Session even though they are not registered for thesis credits during that time. The first draft of your thesis is due in early April, and the thesis defense is scheduled for the last month of the spring semester. **You are strongly advised to leave your winter term free for full time thesis work: in particular, study abroad is NOT recommended during Winter Session of your Senior year.**

Students completing degree requirements at times other than for a June commencement must adjust this timetable accordingly. Students planning to graduate in winter (often referred to as “winter graduates”), should refer to the Winter Graduate schedule. Students spending a semester abroad in their junior year must also make many of these arrangements earlier than this timetable suggests.

HOW TO APPLY: APPLICATION PROCEDURES

To become a candidate for the Degree with Distinction or Honors Degree with Distinction, you must meet with a URP advisor and submit an application and thesis proposal.

Schedule an appointment with an advisor in the Undergraduate Research Program. The advisor will provide you with an overview of the thesis program and will work with you to determine how the program's resources and requirements best fit your own needs and interests. At this meeting, you will receive information about preparing your proposal and be given the application form.

Application forms

The following forms must be submitted to the Undergraduate Research Office:

Degree with Distinction candidates:

- Thesis Proposal (see below for detailed instructions). The Thesis Proposal will be submitted online on the Undergraduate Research Program website under "Senior Thesis" > "Thesis Application System." You must work closely with your Thesis Director and your second reader to write a 3-5 page proposal addressing research goals, significance to the field, methods, timetable, schedule of meetings with faculty, and budget. **You must have the approval of your Thesis Director and second reader before you upload the proposal to the web form.** Your Thesis Director and second reader will indicate their approval by signing the paper application which can then be brought to The Undergraduate Research Program at The Office of Undergraduate Research and Experiential Learning at 180 South College Avenue, Newark, DE 19716. By the end of the summer, your proposal will be sent to your Third Reader for approval. It is possible that your proposal may require revisions before it is fully approved.
- Senior Thesis Application Form. Complete this paper form, available at the URP. Obtain the signatures of your Thesis Director and second reader (note that their signature on the application also indicates approval of your thesis proposal) as well as the department chair. Submit the form to the Undergraduate Research Program. The application is also available online:
http://urp.udel.edu/sites/urp.udel.edu/files/documents/Senior_Thesis_Application.pdf.

Honors Degree with Distinction candidates:

- Honors Degree Application form. Complete this form and submit to the University Honors Program by May 15 of your junior (third) year. This form is required to graduate with an Honors degree, regardless of whether you complete a Senior Thesis or apply for an Honors Degree with Distinction.
- Senior Thesis Application and Proposal Form. Follow the directions outlined above in sections A and B. These two forms are used both for HDWD and DWD candidates.

Instructions for the Thesis Proposal

Writing a thesis proposal often feels like an exercise in hypothesizing (or outright fiction), because much of the work you intend to do is still in the future. Of course, you may know what experiments you want to run, or what articles you want to consult, but outlining your research questions, methods, and especially your timetable will present a challenge. Your proposal will be written with the help of your Thesis Director, should be no more than five pages long, and should attempt to tackle the following questions:

- **Research Goal:** Explain how the question you are investigating is important to your field; refer specifically to two or three scholars in the field whose work is relevant to your research question. How do you plan to build upon or qualify their conclusions? What is your own research goal?
- **Methods:** What methods will you use to pursue this goal?
- **Bibliography:** Include a preliminary bibliography of works you will consult.
- **Timetable:** Outline your anticipated timetable from June through May, including calendar dates for progress you hope to achieve for as many of the following tasks as apply to your field of research: literature reviews, project design, data collection, analysis, and writing of the first draft of your thesis. Discuss an appropriate due date for your first draft with your Thesis Director, however, **the first draft of your thesis will be due to your Thesis Director no later than April 13.** Indicate how much of the work, if any, you have already accomplished. If you plan to use the summer for substantial work on the thesis, provide a detailed timetable for June, July and August that includes your schedule of conferences with your Thesis Director during this period and explains what you hope to have accomplished by September 1.
- **Budget:** Include your budget and sources of funding (even if zero). Consider costs such as photocopying, travel to libraries, and research materials. Consider various opportunities to apply for funding.
- **Human Subjects:** If your project will be using human subjects, your Thesis Director must contact the Office of the Vice Provost for Research, to apply either for a review by the Human Subjects Review Board or for an exemption from the review.
- **Internships and Student Teaching:** If you will participate in an internship or be student teaching your senior year, you should include a description of the arrangements you have made to attend the Senior Thesis course meetings. Contact the URP prior to submission of the application with concerns.

Application Deadlines

Completed DWD and HDWD Senior Thesis applications and proposals are due by **May 15** of your junior (third) year. If you intend to graduate in the fall/winter semester, your application is due by **November 15** of your junior year.

INFORMATION FOR CURRENT THESIS WRITERS

Once you have submitted your proposal and application for a Senior Thesis, you should begin your work on your thesis under the assumption that you will be accepted into the program. If there are any concerns about your proposal, you will be contacted and asked to revise and re-submit it. However, this is rare, so assume “No News is Good News.”

There are no other requirements until the first class meeting of UNIV 401 is held at the beginning of the fall semester, although many students spend all or part of the summer working on their thesis.

Thesis Course Registration

DWD: You must register for **UNIV-401-000** and **UNIV-402-000** in successive semesters of your final baccalaureate (senior) year. Credits for 401 & 402 must total 6 credits.

HDWD: You must register for **UNIV-401-080** and **UNIV-402-080** in successive semesters of your final baccalaureate (senior) year. Credits for 401 & 402 must total 6 credits.

Be sure to register for the appropriate section (DWD = section 000, HDWD = section 080). Students wishing to register for Senior Thesis credits in a fashion other than stipulated (Fall and Spring, 3 credits each) must discuss their plan with an advisor in the URP.

When you register for UNIV 401, you will be asked to select an instructor. This is your Thesis Director. If your director is not listed, contact Lauren Barsky (lbarsky@udel.edu) with your name, the section and credits you wish to register for, and the name of your Thesis Director. If you have co-directors, only one will be responsible for assigning you a grade for UNIV 401 and 402, and this is the faculty which should be listed as the instructor.

An Introduction to the Senior Thesis “Course” UNIV401/402

Students should refer to their UNIV401 &402 Syllabus/Schedule for the appropriate dates and times unless otherwise notified via email or meetings. However, given the plethora of course conflicts among students and teaching conflicts among third readers, the other dates listed below are flexible—that is, you will meet with your research group in the fall and spring, but those dates are negotiable, based on you and your third reader’s availability. The class for UNIV 401 & 402 is designed to provide you with valuable, relevant information that will help you complete your thesis. The courses’ requirements are outlined below.

Each semester begins with an Orientation Meeting, where you will meet with your third reader and the other students who are writing a Senior Thesis. Other classes will cover formatting your thesis, defending your thesis, and other topics beneficial to the process of completing a Senior Thesis. There will be one day set aside for research group presentations, where you will have an opportunity to practice your presentation skills in front of your peers, incorporate their feedback along with your Third Reader’s feedback, and provide feedback to your peers.

UNIV 401 & 402: REQUIREMENTS AND LOGISTICS

Enrollment in UNIV 401/402 is contingent upon acceptance as a candidate for the Honors Degree with Distinction or the Degree with Distinction. Fall graduates should make an appointment with an Undergraduate Research office advisor to discuss how their thesis plans fit into the thesis course schedule. Enrollment in UNIV 402 is contingent upon satisfactory completion of UNIV 401.

Attendance

Unless otherwise stated, attendance at all sessions is **required**. An unexcused absence from a research group meeting may result in the lowering of your grade for UNIV-401 by half of a grade point. (Contact the Undergraduate Research Program immediately if you are forced to miss a required session).

Requirements

- **Orientation Meeting:** All candidates will attend the orientation meeting. The first 20 minutes will be devoted to an overview of the Senior Thesis program's structure, procedures, deadlines, and funding opportunities. The remainder of the meeting will be spent with your research group of four to five students and your group's facilitator, a faculty member from the Board of Senior Thesis Readers who will serve as the third reader for each member of your group.
- **Research Group Presentations:** One meeting each semester is scheduled so that you can present your work to your research group and receive feedback, and also provide feedback for them. These meetings will be facilitated by the group's third reader. You and the other members of your group will give an informal talk, 10-15 minutes in length, in which you describe your work-in-progress to each other and to the thesis students who are present from other groups. You can use PowerPoint, Prezi, or any other visual aid you like. A five-ten minute question and answer period will follow each student's talk.
 - **Learning Goals:** As a researcher, you need to get reactions to your work both from people whose research interests are similar to yours and from people who are interested in your topic but are not in your field. The ability to explain your specialized work to non-specialists in later life will be essential if you continue in research and is useful in any other line of work. Additionally, commenting on the work of other researchers, in one's own field and in other fields, is a professional courtesy that researchers owe one another.
- **Outside Lecture Assignment:** In addition to presenting your work to your research group and providing feedback to them once each semester, you are also required to either attend another research group's set of presentations of your choice (Option #1) OR attend one talk of your choice on campus (Option #2).
 - Option #1:
 - Attend another group's presentation (your own DOES NOT count)
 - Notify the professor/third reader of your attendance. Have them email Victoria Sunnergren (vsunner@udel.edu) by the deadline, confirming your attendance so that you may receive credit for having completed the assignment.
 - You will have to **fill out the rubric/feedback form** (http://www.urel.udel.edu/wp-content/uploads/2015/09/Presentation_Evaluation_form_0.pdf) for each student presenting at the group's presentation day that you are attending. You do not need

to do an additional write-up.

- Option #2:
 - Attend another lecture on campus, in or outside your field, **as long as it's academic**.
 - Ask the presenter a **substantial** question
 - Record both your question and the presenter's response in your notes.
 - Write a 1-2 page summary and analysis of the presentation you attended, analyzing the presenter's oral presentation in terms of both content and format (i.e., the speaker's major research questions, how well you think they answered those questions, and your critique of their presentation skills).
 - Email your write-up via PDF attachment to Victoria Sunnergren (vsunner@udel.edu) by the deadline. To find campus talks and lectures, visit your department's web page, as well as <http://www.udel.edu/events>.
- Formatting and Defending a Thesis Meeting: At this meeting, you will learn more about the University's Thesis Formatting regulations, the logistics of scheduling your Defense, and what will be required for the final submission of your Thesis.
- Celebration of Undergraduate Engaged Scholarship: This event provides a formal and friendly occasion for you to present your final research findings to an audience of younger student researchers, peers, faculty, the university community, and parents. You will have the opportunity to present a poster or exhibit, or to make an oral presentation. In case you somehow managed to skip over this, **attendance is highly recommended**. Participation is strongly encouraged.
- Format Review: Students are required to follow the Senior Thesis format specifications outlined by the University of Delaware, which are embedded in the stylesheets you'll be required to use when formatting your thesis. You'll use the same template as what a master's or doctoral student uses. The URP will ensure you include within your thesis features such as: a list of your figures and tables, page numbers, a table of contents, etc. More about how to tackle these things will be covered at the "Formatting and Defending a Thesis" sessions scheduled in the fall and spring. In the spring, format reviews will be scheduled for each student at the URP if graduating in the spring, or scheduled in the fall if graduating in winter.
- Progress Report: In addition to the scheduled events described above, an approved description of research-in-progress is required in the first semester. Candidates must email the report to all three committee members for review and approval. Items to include in the report include the following:
 - statement of any changes in your primary research question or research goals
 - statement of the significance of secondary literature added since your proposal
 - any change in the methods you are using to pursue your research goals
 - statement of what portions of your research are completed at this time
 - expanded bibliography of works you are consulting
 - updated timetable showing anticipated calendar dates for completion of tasks
 - budget expenses remaining and sources of funding (even if zero)
 - confirmation of Human Subjects Review or exemption granted, if applicable
 - explanation of arrangements you have made to attend required UNIV 402 course meetings if these conflict with another course, internship or student teaching

Grading

At the end of the first semester, an “S” grade is normally assigned to your UNIV-401 credits; “S” means “the project is continuing in the next semester and will be judged upon completion.” The final thesis is graded by your Thesis Director at the end of the second semester, and its grade is assigned to all six thesis credits.

Thesis quality is an important consideration in awarding the Degree with Distinction and Honors Degree with Distinction. To speak plainly, your work is expected to be objectively excellent. Regular consultations with your Thesis Director, early production of drafts and revisions, and your own and your director’s concern for quality should ensure a performance accurately described as “distinguished.” Furthermore, course requirements must be met in order to obtain a good grade for all six (6) credits.

If you were to satisfy the thesis requirement for the DWD or the HDWD but fail to meet the cumulative or major grade index requirement at the time of graduation, you would not be penalized by loss of credit. The six (6) credit hours of UNIV-401 and UNIV-402 will be retained and graded and serve as elective credits in your major field in most departments (check with your advisor), but the enhanced degree would not be awarded.

FINANCIAL RESOURCES

In addition to financial support that may be available through your Thesis Director, several forms of aid are available to students writing senior theses:

- For each semester enrolled in UNIV-401 or UNIV-402, students writing theses can apply to the URP for undergraduate research Supply & Expense Grants designed to defray research expenses up to \$250. This includes the cost of printing posters for presenting at events such as the Celebration of Undergraduate Engaged Scholarship event in April. Application deadlines are mid-October and mid-February, and can be found online at <http://www.urel.udel.edu/urp/awards/>.
- Seniors are also eligible for Winter Session Awards. More information about these awards may be found at <http://www.urel.udel.edu/urp/awards/>.
- The Undergraduate Research Office also provides small stipends for students with demonstrated financial need. For more questions about this, please contact Lauren Barsky at (302) 831-8744 or lbarsky@udel.edu.

IF YOUR THESIS INVOLVES HUMAN SUBJECTS

Senior Thesis candidates who intend to use people, either individually or in groups, for experimental purposes--whether these involve physical, chemical, electrical or psychological stimulation of responses within the body; interviewing or administration of surveys or questionnaires; or other techniques of measurement or evaluation--must have obtained from a University of Delaware Human Subjects Review Board either an approval or an exemption **before** working with the subjects. Some low-risk research is exempt from board review; determination of exemption is made by the Vice-Provost for Research, who chairs the University Human Subjects Review Board.

Procedure: You and your Thesis Director must contact the University's Office of the Vice Provost for Research to discuss whether your project is eligible for an exemption from a full-board review **before you begin your research**. If your project does qualify for an exemption, you must submit in writing the category of exemption, description of the project, copy of any survey, test, or interview questions to be used in the project, and copy of any letter, advertisement, or other written information you will send or give to prospective participants. **A copy of the memo you receive granting approval or exemption must be included as an appendix in your thesis.**

Questions: For all questions or concerns about the process of applying for an exemption or working with human subjects in general, contact Clara Simperts, Research Compliance Coordinator, at (302) 831-2137.

DEALING WITH DATA

If you will be using data in your research, you will need to take a course, such as Psychology Measurement and Statistics, which teaches data analysis. Consult your faculty advisor or the URP.

THE THESIS DEFENSE

Submitting the Final Defense Draft of Your Thesis to Committee Members

You must provide (via email) a complete draft of your thesis to your Thesis Director by the first week of April. **A final draft of the thesis, reflecting all requested revisions, must be provided to all committee members at least one week prior to the defense.** Your committee deserves enough time to read your work, so out of consideration for them and their commitment to working with you, you must email a finalized draft of your thesis to your committee at least one week before your defense date.

The culmination of your undergraduate research, the thesis defense, launches your individual efforts and conclusions into the domain of public information and record. For this reason, the defense is usually a public event to which all interested members of the community--faculty, students, staff, and citizens--are invited. A public defense is desirable for a number of reasons. First, it provides valuable experience for students who plan to pursue graduate degrees since such degrees routinely require public defenses of theses. Second, it builds your self-confidence; you are the primary investigator, the expert, with interesting new work to share. Finally, a public defense affirms your self-worth and the worth of your project since faculty and peers are provided with a public forum for expressing their approval and appreciation. However, do confirm permission to invite guests to your defense with your Thesis Director.

Lest you feel too anxious at the thought of giving your entire defense in public, please know **it is university policy for a portion of your defense to consist of just you and your committee members.** The reason behind this is that while the public can (and should) be free to ask you questions, your committee members are the ones who may follow up on those questions more extensively, make suggestions for revisions, and provide feedback that may not concern the public. In other words, most of your defense may be public, but a portion of your defense must be just you and your faculty members.

A defense isn't necessarily a "gotcha" session, but it is a defense. You are expected to be ready to explain and defend your ideas, and field questions about your work. While this is a defense, one of the worst things you can do is become defensive about what you've done. Instead, focus on explaining the value of your ideas to your committee, and be prepared to field some tough questions from everyone attending your defense.

Defense Procedure

Typically, an HDWD or DWD candidate's defense will proceed in the following fashion: In a seminar room or classroom, you will meet with committee members and other interested audience. You should seek permission from your Thesis Director regarding the invitation of guests to the defense. You will begin by giving a 20-25 minute formal oral presentation of your findings using slides or other visual aids where appropriate. Your Thesis Director, as chairperson of the committee, will then invite questions from members of the audience. Questions may range from detailed clarification of your

research procedure to broad reflections on issues in your field of study, although the emphasis will be on your thesis itself. This questioning usually lasts approximately an hour, after which the general audience leaves, and your committee will ask you additional questions. Be sure to bring a hard copy of your thesis in its most complete form to the defense to refer to during the question and answer session. You will then leave the room for about ten minutes so that the committee can discuss the defense and any specific revisions or additions you must make in your final version of the thesis. The committee will then notify you that, pending the completion of these revisions/additions, the thesis as defended has been judged “distinguished.”

Defense in the Creative Arts

The format for the defense of a thesis in the creative arts is basically the same as for theses in other disciplines. The student must provide the written and visual portion of the thesis to the defense committee at least a week before the defense. Then all members of the thesis defense committee attend the candidate's art exhibition, design presentation, show, or performance. A meeting with the committee for discussion is held either immediately following the show or performance or within a few days. During this discussion, which should be about an hour long, the Thesis Director serves as moderator, asking questions of the candidate and inviting questions from other members of the committee. At the end of the discussion, the candidate leaves the room for about ten minutes so that the committee can discuss the defense and agree upon any specific revisions or additions that will be required for the final version. Requested additions may include visual reproduction of the exhibition installation, design presentation, show, or performance. The committee then notifies the student that, pending completion of these revisions/additions, the thesis as defended has been judged “distinguished.”

FORMATTING YOUR THESIS

As you begin writing your thesis, plan to devote a brief amount of time to considering how you want to format your thesis. Your thesis should be organized in chapters and sub-headings, and there are very specific requirements concerning margins, page numberings, and the formatting of particular pages such as the Title Page and the Approval page. These guidelines are set by the University of Delaware, and it is vital that your thesis follow them. Each thesis candidate is required to have a **format review** at the URP. Format reviews will be scheduled throughout April. Format errors must be corrected **before** you submit your final thesis. If you are unsure how to fit your thesis into the format requirements, schedule an appointment with an adviser at the URP **before you** begin writing.

Attached as an appendix to this handbook is a checklist that goes over the major formatting requirements for all standard senior theses. This checklist can serve as a guide for you as you begin formatting and also as a final check when you think you are done. The information on the checklist is broad and meant only to provide you with a basic idea of everything that needs to go into the writing of your thesis. For more information, see <http://urp.udel.edu/content/current-thesis-students>.

Time saver

The University provides Senior Thesis Style Sheets, which are blank templates already set with most of the necessary formatting requirements. It is highly recommended that you use them, and they are available on the URP's Current Senior Thesis Students page. When using the style sheets please devote time to downloading and reading the tutorial/handbook for instructions on how to use the sheets. Doing so will save you time and aggravation in the long run. If your computer does not run one of the accepted platforms than formatting may be done on library computers.

Thesis Format in the Creative Arts

Although the introductory and explanatory written portions of an arts thesis can be quite short, keep in mind that they **must** be well written and must meet University of Delaware format specifications. It is important that you begin working on the written part of your thesis early in the second semester. All visuals must be well identified with labels, captions, or visual identification pages. Identification should include dimensions, media, and date of completion. Advisors in the Undergraduate Research Office assist each arts candidate individually to ensure the thesis meets these specifications.

FINAL THESIS SUBMISSION

By high noon on the Wednesday before Commencement, your final approved thesis must be submitted to the Undergraduate Research Program. An electronic copy (as a PDF) must be submitted, along with the printed out title page, signed approval page, and abstract. The title page, approval page, and abstract should be submitted on bond paper that can be obtained at the URP Office. The approval page must be signed by all thesis committee members (but not by the Director of the Honors Program or the Chair of the University Committee on Student and Faculty Honors). The electronic version can be submitted on a USB flash drive or zip drive; since this version of your thesis will be copied onto an Undergraduate Research office hard drive, your electronic device will be returned to you.

The electronic copy will be kept at the Undergraduate Research office for reference by future Senior Thesis candidates. Additionally, if you grant the URP copyright consent, your thesis may be made available on the University of Delaware Library's Institutional Repository. See the Copyright Consent Form for more information.

If you would like a bound copy of your thesis for your personal use (or if your director or department requests a print copy), you may leave additional signature pages with the URP and a self-addressed envelope, so the approval pages can be returned to you after being signed by either the Director of the Honors Program or the Chair of the University Committee on Student and Faculty Honors.

WITHDRAWAL

Sometime during the fall or spring semester, you may realize that writing a thesis is not feasible for you at this point in your academic career, and that is perfectly all right. There is never a penalty for withdrawal from candidacy in either the DWD or HDWD program. In fact, **full recognition is given for all the work you have accomplished**. Thus, if circumstances become unfavorable to the timely completion and defense of your thesis, you will receive individual help from the Undergraduate Research Program, as well as from your Thesis Director, in working out the best alternative plan.

Credit

A student may withdraw from the program at the end of the first semester and receive three (3) credits, or withdraw at the end of the second semester and receive six (6) credits. The credits received and grades awarded will be considered independent study courses, and are also independent of any "Distinction" designation. **Be aware that if these credits are changed to another course, UNIV 402 will not count as a second writing requirement or as an Honors capstone course, and may affect whether or not you receive an honors degree (different from the Honors Degree with Distinction).** If the thesis is not defended, the UNIV-401 and UNIV-402 registration must be changed to research or special problem (466) credits in the major department and the "S" grade must be changed. For information about withdrawing or changing registration, please contact Lauren Barsky (lbarsky@udel.edu).

Some Examples of Alternatives for Credit:

- If you have completed research for your thesis but have not completed the thesis itself, the solution may be to write up the results of the research that has been accomplished in a term paper or technical report and reclassify the thesis credits as “independent study” or “special problem” credits (466) in the major. Another option is to withdraw from the Senior Thesis course. In this case a “W” is recorded on the transcript.
- If your thesis is nearly completed but requires just a few weeks beyond the thesis defense deadline at the end of the second semester of your senior year, you may wish to delay graduation from June to August. In this case, you must request an “S” grade for UNIV-402 and reschedule the defense date with the thesis advisory committee. There is no tuition or other financial cost to the student who uses this option. (Also, it will not interfere with your plans to begin graduate school in August.)
- If you complete and successfully defend your thesis but your final grade index is below the level required for the enriched degree, the thesis credits will remain on the transcript (UNIV-401/402). In this case, even though the enriched degree cannot be awarded, faculty letters of recommendation and student resumes can refer to the successfully completed Senior Thesis.
- If you encounter a serious problem with your thesis and are considering withdrawing or delaying your defense, you **must** confer with an advisor in the URP, since it is important to be thoroughly familiar with the different options available. For more information about the withdrawal procedure, please contact Lauren Barsky (lbarsky@udel.edu).

APPENDIX A: THESIS FORMATTING CHECKLIST

Have you done all of this?

General Organization

- ❑ Assembled the sections of your paper in order (front matter, body, back matter)
- ❑ Included the required title page, table of contents, approval page, and abstract
- ❑ Used the correct name for your major and the correct wording for your degree (including conferral date) on the title page
- ❑ Included the correct signatures for your degree on the approval page
- ❑ Included in the table of contents all sections of the paper that follow the table of contents
- ❑ Divided your thesis into chapters which logically break up the information
- ❑ Followed a consistent reference style, using correct spelling, accurate dates, and consistent punctuation for all references
- ❑ Verified that every source mentioned/discussed in the body of the paper appears in the final Reference list or Bibliography
- ❑ Enclosed a copy of your Human Subjects approval or exemption as part of your appendix
- ❑ Included any necessary pocket material

Specific Formatting (Paper, Page Numbers, Spacing, Margins, etc...)

- ❑ Used bond paper from the URP office for the specified pages
- ❑ Set correct margins for every page
- ❑ Checked that all page numbers are formatted consistently (font size and type), as well as placed correctly throughout the thesis
- ❑ Verified that paper sections actually appear--with correct headings--on the page numbers indicated in the table of contents
- ❑ Used a standard, 12-pt. font consistently throughout the thesis
- ❑ Used consistent spacing between headings and text, text and figures and tables, and between paragraphs
- ❑ Correctly formatted table headings and figure captions
- ❑ Matched exactly the table heading or figure caption to the title and page number in the list of tables or figures
- ❑ Observed the margin and page numbering requirements for tables and figures
- ❑ Checked to see that references or bibliographic entries and table and figure captions are not split across two pages
- ❑ Checked for margin errors and flawed or missing pages in all copies of your paper after photocopying the original
- ❑ **Proofread your entire paper for correct spelling, grammar, usage, and punctuation**

APPENDIX B: HOW TO SURVIVE YOUR DEFENSE & SUBMIT YOUR THESIS

In the last few weeks of the semester there are, to put it mildly, a number of competing demands on your time. With that in mind, we put together this handy checklist for you, to help you retain what sanity you have left. Please remember that short of writing your thesis for you, we're here to help you in any way we can.

THESIS FORMATTING

FORMAT REVIEW: Kindly use the Senior Thesis stylesheets and use the formatting checklist to ensure that your finished thesis will meet all University format regulations. As you complete your written thesis, schedule a Format Review with the Undergraduate Research Program, ideally 2-3 weeks before your thesis defense.

FORMATTING THE APPROVAL PAGE: In addition to your thesis committee, your Approval Page must have a space for a fourth signature. The URP will get this signature for you; you are responsible only for your thesis committee's signatures.

FORMATTING THE TITLE PAGE: Your title page will list your hard-earned degree. Use these guidelines:

For DWD:

Bachelor of Arts in [Theatre / Deception] with Distinction
Bachelor of Science in [Biology / Spelunking] with Distinction
Bachelor of [Civil / Diabolical] Engineering with Distinction

For HDWD:

Honors Bachelor of Arts in [Physics / String Theory] with Distinction
Honors Bachelor of Science in [English / Jane Austen] with Distinction
Honors Bachelor of [Chemical / A.I. DuPont] Engineering with Distinction

Dean Scholars should contact the URP to determine their correct degree title.

THE DEFENSE

1. **Before the deadline, schedule your defense.** Faculty are insanely busy at the end of the semester, so contact your committee early in the semester to arrange a date and time for your defense. Consider using doodle.com to schedule your defense. Then schedule a room through your department; you can contact the administrative assistant in your department for help with this. Most departments have a conference room you can use. **As soon as you have scheduled the date and location of your defense, please email this information to Victoria Sunnergren (vsunner@udel.edu).**

2. At least one week before your defense, **email a final draft of your thesis to your committee**. Discuss with your committee members how much advance time they need to read your thesis. This should be your most complete copy to date and should include a table of contents, lists of figures and tables, notes and bibliography. Your committee members cannot be expected to be prepared for your defense if your thesis is incomplete.
3. Before the deadline, **hold your Defense**. At your defense, you will likely give a short presentation of your work. Your committee will have read your thesis and have prepared questions. Your Thesis Director will act as moderator and a discussion of your work should develop, and your committee members will provide suggestions for required revisions. After you make these revisions, your thesis will be officially complete.
4. The Defense Report: Immediately after your Defense, your third reader will fill out your Defense Report and submit it to the Undergraduate Research Program.
5. Post-Defense Signatures. At the defense, find out when each committee member will be available to sign your final copy after you have made the final required revisions. Immediately after your defense, your committee members may agree to sign the approval page of your thesis, except for your Thesis Director, who may wait until you make the final revisions and email it to her/him for their approval. Ask your Thesis Director what they prefer.

Final Submission

You may choose to print out a copy for yourself or your Thesis Director, but will be responsible for submitting an electronic version to URP.

Before you submit the final copy of your thesis,

- Meet with the URP for a format review (can be held before or after your defense)
- Successfully defend your thesis
- Make all revisions requested by your committee
- Have your three committee members sign your approval page. You are not responsible for the fourth signature.

Submitting your thesis

To submit a digital copy of your thesis, bring the following to the URP by noon on the Wednesday before graduation:

- An electronic copy of your thesis saved as a pdf, accessible via your email or a flash drive. The file name for the PDF should be your name, last name first. (Ex: Diker,Elizabeth.pdf)
- A print copy, on bond paper, of your
 - Title page
 - Approval (signature) page, signed by all three of your committee members
 - AbstractThe URP supplies bond paper for the above three pages
- Signed copyright consent form (optional)

Copyright Consent

The digital copy of your thesis will be kept at the Undergraduate Research office for reference by future Senior Thesis candidates. With your permission as copyright holder, your thesis will also be made publicly accessible via the web, and permanently stored in the library's Institutional Repository. To provide your permission, fill out or email the copyright submission form, located at <http://urp.udel.edu/content/sample-theses>, and submit the to the URP office. If you have any further questions about this, please contact Lauren Barsky (lbarsky@udel.edu).