



## SENIOR THESIS FOR DISTINCTION GUIDELINES

Research is an intellectual enterprise that demands dedication, creativity, and independent judgment. The Senior Thesis for Distinction is an opportunity for undergraduate seniors enrolled in the College of Health and Rehabilitation Sciences: Sargent College to complete an in-depth research experience within their major or minor field of study. A student who is applying to participate in a Senior Thesis for Distinction project must demonstrate the intellectual curiosity, maturity, and self-discipline needed to complete a demanding undertaking within a constrained time period, while simultaneously managing their course load. Successful completion of the Senior Thesis for Distinction will result in the designation of “*Graduation with Distinction*” appearing on the student’s diploma and transcript.

### OBJECTIVES

The Senior Thesis for Distinction is sponsored by the Dean’s Office and provides senior students (see requirements below) with an opportunity to participate in a focused research project. The research can be supervised either by a Sargent College faculty member or a researcher external to the college or university. If the student is engaging in research with an external researcher the student must also identify a Sargent College faculty member willing to provide co-mentorship and complete the academic requirements of the thesis, such as entering a grade for the student. Each student is responsible for executing their own research project. Students will collaborate with others in the faculty mentor’s lab or research group, but they must make an active and significant contribution to their own project. Successful completion of the Senior Thesis for Distinction will help students to gain understanding of the research enterprise and to prepare for graduate programs. Additionally, students will develop technical writing and oral presentation skills through interactions in the laboratory by writing a final report on their project, and by summarizing their work in a presentation before students and faculty.

### APPLICATION REQUIREMENTS

A minimum grade point average of 3.50 is required to be eligible for applying to participate in a Sargent Senior Thesis for Distinction project. You must choose a faculty mentor who is a full-time faculty member at Boston University with an affiliation in Sargent College and who is enthusiastic about working with you on a suitable project. Please complete the application form, in consultation with your proposed faculty mentor. The materials to be included in your application are listed later in the application.

After the application is completed and signed by the student and by the faculty mentor, submit the form and proposal to Associate Dean Gael Orsmond (by email to [gorsmond@bu.edu](mailto:gorsmond@bu.edu)). Applications will be evaluated by an ad-hoc committee with research expertise, taking into account the individual student’s academic record, the quality of the research proposal, and the description of how the project will contribute to the student’s academic and career goals.

### APPLICATION AND ENROLLMENT

Students must complete four credits in their mentor’s section of the senior thesis course, SAR HP495, in their final two semesters of undergraduate study at Boston University. The application should thus be completed prior to the beginning of the second to last semester of enrollment as an undergraduate, typically in Spring Semester of the Junior year. The deadlines for submission of the completed application are as follows:

TO BEGIN IN FALL SEMESTER (most students)

MAY 15

TO BEGIN IN SPRING SEMESTER

NOV 15

Each applicant will be notified of the committee's decision, and – if applicable – how to register for the appropriate course section with assistance from the Sargent Academic Services Center (ASC). In case of significant complications with project collaboration, scheduling, or other difficulties, both the student and the faculty mentor have the option to terminate enrollment in the Senior Thesis for Distinction during or at the end of the first semester.

## COMPLETION CRITERIA

To graduate with the designation of distinction on their Boston University transcript, students must:

- Enroll in the Sargent Senior Thesis for Distinction course (SAR HP495) for a total of 4 credits (typically, 2 credits per semester). The course has an expected time commitment of 10-12 hours per week of work on a mentored research project. A grade of B+ or better in each semester is required.
- Complete a thesis, typically written in the form of a scientific journal manuscript, which describes background, methods, results, and discussion including citations to the relevant literature, and which is submitted to the mentor for evaluation.
- Deliver an oral presentation of the research at the Sargent College Thesis for Distinction event which is held at the end of the spring semester.

At the end of the project, the faculty mentor will evaluate the written thesis as well as the total body of work accomplished by the student to determine the final grade and to recommend whether the student shall receive the designation of distinction.

## TIMELINE

The following basic timeline should be followed in order to ensure successful completion of the Thesis for Distinction. Note that this timeline assumes a Fall semester start date. Students who anticipate graduating in the fall can propose to conduct the research during the Spring and following Fall semesters.

- **May 15:** *Submission of application with project proposal by the student to the Associate Dean*
- **June 15:** *Feedback provided by the review committee*
- **October 15:** *Submission of outline of introduction of thesis that includes references, along with reference list, to the Associate Dean*
- **End of Fall Semester:** *Student submits a written progress report on first semester activities to the Associate Dean and SAR HP495 grade is assigned by the mentor*
- **First day of Spring Semester:** *Decision on continuation of research to be conveyed to student by mentor*
- **March 1:** *First Draft of written thesis is due to mentor (only)*
- **May 1:** *Final version of written thesis due to mentor (only) who evaluates the work for suitability to be included in the presentation event*
- **May (exact date TBA):** *Oral presentation of research at Sargent College Thesis for Distinction event; final grade in SAR HP495 is assigned by mentor*

## POLICIES AND GUIDELINES

For any questions, deviations from the above timeline or interpretation of the standard procedures for the Sargent Thesis for Distinction, please consult Associate Dean Gael Orsmond (gorsmond@bu.edu).

## OTHER IMPORTANT INFORMATION

### Study Abroad/BU Programs Outside of Charles River Campus:

- The Senior Thesis for Distinction is designed for seniors to work on a two-semester research project while on campus during their final two semesters. Both the faculty mentor and the student must be on campus while work on the project is in progress.
- If you will not be on campus during either semester of your project and want to appeal the on-campus requirement for compelling academic reasons, contact Associate Dean Gael Orsmond (gorsmond@bu.edu). Please be advised that your research mentor must support your project completion plan.

### Students who have official part-time status at BU:

- If official part-time status has been approved for you, it is acceptable to be enrolled as a part-time student for one of the semesters in your Senior Thesis for Distinction work. If you are considering part-time status as a senior student, please contact the Academic Services Center for assistance with the process.

### Internship Requirements:

- The Senior Thesis for Distinction may be a suitable substitution for your major's senior internship requirement. Please check with your program faculty advisor for further details.

### Dual Degree Programs:

- Students enrolled in dual degree programs (dual undergraduate programs or combined undergrad/graduate programs) may apply for the Senior Thesis for Distinction if their degree programs will allow for the necessary flexibility and time commitment. Students should consult with their faculty advisors about the full range of their academic program requirements prior to applying to participate in the Sargent Senior Thesis for Distinction.

### UROP:

- Students working on Senior Thesis for Distinction projects are eligible for (but not required to participate in) the Undergraduate Research Opportunities Program (UROP).
- Students participating in the Senior Thesis for Distinction may apply for UROP funding for a supplies grant (FROG) to supplement the costs of their research supplies. However, *while students are receiving academic credit for the Senior Thesis for Distinction*, they may not receive a *stipend grant* (Faculty Matching Grant (FMG) or Student Research Award (SRA) from UROP.
- Please specify in the application how any UROP support is being applied to the thesis project.

### Kilachand Honors College (KHC):

- The KHC Keystone project can be conducted with a Sargent College faculty mentor, but planning must begin in the junior year.
- The KHC program director and Sargent College faculty mentor must agree that the scope and effort required to complete the project is of suitable depth to warrant fulfillment of both the KHC Keystone and the Sargent Senior Thesis for Distinction. The student should include a summary of this agreement within their application for the Sargent Senior Thesis for Distinction.
- KHC students will register for SAR HP495 rather than KHC course(s).

## THESIS FOR DISTINCTION DOCUMENTS

Including the application documents, there are a number of required assignments throughout the thesis process. The various reports are designed to enhance the student's sense of progress, accountability, and to provide a formal structure to SAR HP495. Because of the range of thesis projects and topics, the faculty mentor makes the final determination about the specific structure of all documents beyond the application process. General guidelines are provided below.

**Application/project description:** Provide a one-page (single spaced) summary of your project, written in consultation with and reviewed by the faculty mentor who has agreed to work with you. This proposal should briefly outline the major goal(s) of the proposed work, the potential significance of your project, and include a short description of the methods that you plan to use to perform the research.

**Application/career impact description:** Include a brief (1-2 paragraphs) narrative of how the proposed project will help you to fulfill your academic and career goals.

**Referenced Introduction Outline:** Provide a detailed outline of the introduction that is organized into paragraphs and includes references. Also include a complete reference list of all the articles that will be used in the introduction to the thesis.

**Written Progress Report:** Summarize the fall semester activities including both achievements and challenges. Be sure to comment on the likelihood that the project will be completed on time. Please limit your report to 1-2 double-spaced pages in length.

**Final Version of Written Thesis:** The thesis format is determined by the mentor; it is generally written in the form of a journal manuscript, which includes an introductory section on previous work, experimental methods, statistical analyses, results, and discussion. It also includes all citations to the relevant literature. Typically, this type of document will be at least 20 double-spaced pages long (about 5000 words excluding references and tables/figures). The faculty mentor is the sole recipient and may provide an alternative framework based on specifics of the project.

**PowerPoint for the Sargent College Thesis for Distinction event:** Each student will discuss their project at a symposium attended by the Dean's office, faculty, lab colleagues, and friends. The format and time-per-student will vary depending on the number of thesis projects being presented. A **strict time limit** will be enforced; it is recommended that the PowerPoint be no more than 10-12 slides in length and use a specific structure:

- Title Slide: Student's name and major, Project title, Faculty Mentor's name
- Motivation: Describes why the project was necessary
- Methods: Tells the audience how the project was done
- Results: Summarizes what was found
- Discussion: Provides the implications of the findings for theory, future research and/or immediate applicability.
- Acknowledgments: Identifies everyone who has helped with the thesis.

Please note that most of the audience will not be familiar with the project goals and be sure to provide suitable explanation as part of your talk.