

GUIDELINES FOR SENIOR THESES & HONORS
Department of Earth, Environmental and Planetary Sciences
Brown University 2025-2026

Summary:

This document describes the guidelines for completing a *Senior Thesis* on page one, which is an opportunity available to undergraduate students in their senior year. Furthermore, this document also summarizes the departmental guidelines for obtaining a degree with *Honors* on page two, which the University specifies may be awarded to seniors with superior academic records in their concentrations who complete Honors theses. Please note that students must take the initiative in asking to be considered for Honors, and in completing all of the various steps by the specified deadlines. The remainder of this document contains additional advice, most of which is aimed at students pursuing *Honors*.

Senior Thesis Guidelines:

1. Students who wish to write a Senior Thesis must take at least one semester of EEPS 1970 (Undergraduate Senior Thesis Course). This is true for both Sc.B. and A.B. students.
2. The thesis project should result in a written paper following the format and style of regular scientific journals. This thesis document should be read by the faculty advisor, who should provide feedback that the student can incorporate into a revised version.
3. Everyone who writes a Senior Thesis is encouraged to present the results of their work to the department, friends, and family. Consult with your faculty advisor and concentration advisor to identify a good date, time, and room.
4. It is expected that students who write Senior Theses will do so during their senior year. Exceptions can be made in rare circumstances.
5. Students should identify a topic and faculty advisor *prior* to the semester in which they propose to do the research. Professors may have limited lab space or time for undergrad thesis advising, and they need to plan in advance. It is expected that the faculty advisor will be from DEEPS.

Senior Thesis Milestones:

1. For the first semester of EEPS 1970: No later than "the last day to add a course without a fee" (Sept. 16, 2025 in the fall semester), students taking EEPS 1970 must submit a 1-2-page document to both their faculty research advisor and their concentration advisor. This document should define the research question(s), describe the approach and scope of the results, and contain a rough time table for the project, including a plan for the frequency and nature of meetings with the faculty research advisor.
2. In consultation with your faculty advisor, develop a plan for the frequency and nature of your meetings during the semester (at least one regularly scheduled meeting per week is strongly advised), deadlines for timely completion of various portions of the work, and the nature of the final written thesis document, which is typically ~7-10 pages single spaced plus figures and reference section.
3. The final version of the thesis document, which incorporates any feedback from the faculty advisor on earlier drafts, must be turned in before a course grade is assigned by the faculty advisor. Students should turn in one paper copy of the final revised thesis (pages securely

bound) to Pat Davey and digital copies to Pat Davey and the faculty research advisor. Binding materials are available in the DEEPS main office from Pat Davey.

Honors Guidelines:

1. Students who wish to pursue Honors must take two semesters of EEPS 1970 (Undergraduate Senior Thesis Course). This is true for both Sc.B. and A.B. students.
2. The Honors requirements are more stringent than just the satisfactory completion of EEPS 1970. An Honors degree requires a strong academic record and the completion and oral presentation of a high-quality thesis, as judged by DEEPS faculty.
3. It is expected that students who pursue Honors will do so during the fall and spring semesters of their senior year. Exceptions can be made in rare circumstances.
4. Students should identify a topic and faculty advisor *prior* to the semester in which they propose to do the research. Professors may have limited lab space or time for undergrad thesis advising, and they need to plan in advance. It is expected that the faculty advisor will be from DEEPS.

Honors Milestones:

1. For the first semester of EEPS 1970: No later than "the last day to add a course without a fee" (Sept. 16, 2025 in the fall semester), students taking EEPS 1970 must submit a 1-2-page document to both their faculty research advisor and their concentration advisor. This document should define the research question(s), describe the approach and scope of the results, and contain a rough time table for the project, including a plan for the frequency and nature of meetings with the faculty research advisor.
2. For the second semester of EEPS 1970: No later than "the last day to add a course without a fee" (Feb. 3, 2026 in the spring semester), students must submit a well-written 2-page document indicating their intention to pursue Honors. This should include: (1) the project title and (2) brief but thorough descriptions of: the research question being addressed, the methods being used, any results to date, the applications or broader significance of your research, and the estimated timetable (weekly) for completion. This document should be given to the main faculty research advisor and to all DEEPS concentration advisors and the DEEPS Director of Undergraduate Studies.
3. Students must present their work orally to a general audience that includes the faculty advisor, two additional readers (typically DEEPS faculty members), and at least one of the concentration advisors, who will also assist in evaluating the quality of the thesis research. Presentations are normally during the last week of April.
4. A draft of the thesis should be distributed to all readers at least seven days before the oral presentation.
5. Students must turn in a final revised thesis no later than the last day of final exam period, with one paper copy (pages securely bound) to Pat Davey and digital copies to Pat Davey and the faculty research advisor. Binding materials are available in the DEEPS main office from Pat Davey.

Honors Overview

Honors may be awarded to candidates for either A.B. or Sc.B degrees; the departmental requirements are essentially identical (see below for details), and include an Honors thesis completed during two semesters of EEPS 1970 (Undergraduate Senior Thesis Course). Sc.B. students are required to take one semester of 1970, and may count the second semester toward their elective concentration courses. A.B. students may take one semester of 1970 as one of their elective concentration courses.

The Honors requirements are more stringent than just the satisfactory completion of EEPS 1970. An Honors degree requires a strong academic record and completion of a high quality thesis, as judged by departmental faculty. Honors students take two semesters of 1970, sometimes in addition to research during at least part of the previous summer. A senior who is considering Honors should discuss this with their concentration advisor early in fall semester (or even the year prior), to think about the balance of thesis demands with other coursework, extracurricular commitments, and time planning for post-graduation.

Honors Requirements

1. Superior academic record in the concentration.

In order to qualify for Honors, a student must have a superior academic record in their concentration, defined in part by obtaining a majority of A or S with distinction grades in concentration courses.

2. Completion of an honors thesis and oral presentation

An Honors thesis should demonstrate effort and scholarship beyond a regular thesis. This does not necessarily mean a longer paper, nor does it mean more lab work. Rather, the honors thesis should demonstrate fundamentally strong, original research similar to publishable papers in the field.

(a) An Honors project is supervised by a faculty member, usually in DEEPS, but rarely in a different department such as EEB; in the latter case you must identify a faculty member in DEEPS who will serve as co-advisor and with whom you will enroll in EEPS 1970.

(b) During the fall semester of your EEPS 1970 course you should discuss with your faculty advisor the possibility of pursuing Honors and their expectations for what work that would entail. Make sure to discuss the faculty expectations for what you will write up and submit at the end of fall semester to receive a grade for your EEPS 1970 course.

(c) By the end of ADD/DROP period in February you must submit a well-written ~two page document indicating your intention for Honors, including the project title and brief but thorough descriptions of:

the research question being addressed,

the methods being used,

any results to date,

the applications or broader significance of your research,
your estimated time table (weekly) for completion.

This document should be given to the faculty advisor and to all the concentration advisors. Note that you are free to decide at a later point that you do not wish to complete the Honors requirements. In that case you can still complete, write, and turn in a Senior Thesis, which will be listed in the departmental commencement program.

(d) Identify two additional thesis readers and inform your concentration advisor who they are. Usually the readers will be other DEEPS faculty members (tenure track or research). If the main research advisor is in another department, one of the readers will be the DEEPS co-advisor, and the other should also be a DEEPS faculty member in most cases. If your primary research advisor and DEEPS co-advisor indicate that it would be helpful to your project for the second reader to be a faculty member outside of DEEPS, that arrangement is also an option. If your main research advisor is in DEEPS, then one of the two additional readers could be a senior graduate student or post-doc with whom you have worked. These readers will provide feedback to you, and provide feedback to the department on the quality of the thesis to assist in evaluating whether it is an honors thesis.

(e) Your written thesis should go through several drafts and revisions (see timeline). Honors theses are commonly ~10-15 pages single-spaced, plus figures and a references section. Theses should follow the format of a standard scientific paper, and should include an abstract at the beginning and a references section at the end. Be sure to discuss the format/structure of your thesis with your thesis advisor early on in the writing process.

(f) You must present your work orally to a general audience that includes the faculty advisor and the two readers, and at least one of the concentration advisors, who will also assist in evaluating the quality of the thesis research. Presentations are normally during the last week of April.

It is your responsibility to identify a date and time (that your readers and concentration advisor are available), to reserve a room (with Pat Davey), and to inform the DEEPS Director of Undergraduate Studies about your plan so that it can be included in announcements to the department. It is common for two or three seniors who have similar research advisors and/or readers to present their theses in one longer session.

You should give a professional presentation, aimed at a general audience, of about 20 minutes, and allow ~10 minutes for questions. It is imperative to practice your talk in advance, and get feedback from your main advisor and others.

(g) After your oral presentation, the faculty advisor and readers will let the concentration advisors know (in writing) if they agree that the thesis is of Honors quality. The concentration advisors will consider your academic record as well as the thesis work, and make the final recommendation for Honors to the University (and inform you).

(h) After your oral presentation, you will complete a final revision of the written thesis, taking into account suggestions from the advisor and two readers, as well as points that came up in discussion after your talk.

(i) You should make one paper copy of your thesis for the department (please give this to Pat Davey in a folder that holds the pages together). Pat Davey can provide the materials needed to bind your thesis. Please send an electronic version to Pat Davey and to your advisor; verify with your advisor that it is OK for your thesis to be posted on the department website.

Timeline and Checklist

The dates below are for students completing their degree requirements in May. They represent the latest date to accomplish the tasks. For those completing requirements in December, there will be equivalent dates in first semester; talk to your concentration advisor if you have any questions.

End of drop/add period in September: Turn in ~one page proposal for your fall EEPS 1970 research project to your faculty advisor (including your DEEPS co-advisor if your main advisor is in a different department or institution).

End of drop/add period in February: Declare your intention to pursue Honors, in writing, to your research advisor and your concentration advisor. Include: project title, and a brief but detailed account of the research question, methods, results to date, anticipated broader implications, and a weekly outline of remaining work for second semester.

Friday March 13: In consultation with your research advisor, identify your two readers, and meet with them to ask if they are willing to serve in that role (read your draft thesis, supply you with written feedback, and attend your oral presentation).

Friday April 3: Give your research advisor a complete first draft of your thesis (text plus figures), so that you can get their feedback and then undertake a thorough revision before giving it to your readers.

Friday April 17: (a) Give a copy of your revised thesis to your two readers and your advisor. (b) Identify a date and time for your oral presentation, in consultation with your advisor and readers and concentration advisor. (c) Reserve a room with Pat Davey. (d) Let the Director of Undergraduate Studies know the date/time of your presentation. We also encourage you to create an engaging flier to advertise your presentation and post/email it.

Tuesday April 29: Give your oral presentation on or before Tuesday April 28. This deadline provides a few days for the undergrad advisors to finalize honors recommendations before the university deadline.

Last day of final exam period: Turn in your final revised thesis:

- One paper copy for the department, to Pat Davey; this should be in a folder that holds the pages together in a secure way, or bound (see above);
- A digital copy to Pat Davey;
- A digital copy to your advisor.

University Rules and Regulations for Honors

Guidelines are available here:

<https://www.brown.edu/academics/college/degree/concentrations/honors>