

LAFAYETTE

GEOLOGY

Department of Geology and Environmental Geosciences

116 Van Wickle Hall ♦ College Drive ♦ Easton, PA 18042 ♦ TEL 610-330-5193 ♦ www.lafayette.edu

Geology Department Senior Honors Thesis Guidelines

Before Senior Year – Recommended Preparation

In preparation for completing a senior thesis, the student is strongly encouraged to enroll in either an independent study or to complete EXCEL research with the faculty mentor they wish to conduct a thesis with either their sophomore or junior year. During the spring semester of junior year, students are strongly encouraged to discuss the possibility of completing a senior thesis and potential thesis projects with a faculty mentor who has expertise in their area of interest. At the end of the spring semester of their junior year or during the summer before their senior year, thesis students with the guidance of their research mentor should develop a research plan and if possible collect some preliminary data.

Candidates for honors must have by graduation a cumulative GPA of 3.00 and a GPA of 3.20 within their honors department.

Fall Semester of Senior Year

The student should enroll in Thesis (Geology 495) and commence their research project under the supervision of their research mentor. At the start of the semester, the student and research mentor will develop a thesis syllabus that contains a statement of objectives as well as a reasonable thesis timeline and a list of major tasks for completing the necessary elements of a senior thesis (see Appendix A for sample syllabus). Early in the fall semester, the student in close consultation with their research mentor should form a thesis committee. The committee should consist of the student's research mentor, one other member of the Geology Department, and one member outside of the Geology Department who can be either a Lafayette College Faculty member or someone external to the College who possesses relevant expertise. Students should expect to meet regularly (~ weekly) with their research advisor. They should also periodically check in with the other members of their thesis committee about their progress.

Thesis activities should proceed in general accordance with the thesis timeline agreed upon during the first few weeks of the semester. Generally, early in the fall semester students will work on collecting data as well as a review of relevant scholarly literature. By the end of fall semester, students should produce for evaluation by their research advisor a draft of their introduction, methods, and preliminary results sections, including relevant

figures and references (~10-15 pages including figures and references). At the end of fall semester, all students pursuing theses in the Geology Department will be required to give an overview presentation of their thesis to the thesis committee, and department faculty and students. The presentation will entail an explanation of the motivation for their study citing relevant scholarly literature, a description of the methods they have employed and/or intend to employ, and any initial results they have obtained. Presentations should be ~10-15 minutes in duration and will be followed by a question and answer period. The thesis committee will evaluate the student's progress in accordance with the Geology Department's Rubric for Honors Theses (see Appendix B) and make a recommendation about whether or not the student should continue the thesis during spring semester.

It is recommended but not required that thesis students submit a Northeast GSA or NCUR abstract in anticipation of presenting their work at one of these scholarly meetings held during spring semester.

If data collection during the fall semester was delayed or proceeded more slowly than initially anticipated, students should be prepared to return to campus during interim session to make additional progress on their projects.

Spring Semester

If the thesis committee makes a positive recommendation at the end of fall semester, at the start of spring semester the thesis student should enroll in Thesis (Geology 496). The thesis student and research mentor must complete and submit a Notice of Graduation with Departmental Honors form to the Academic Progress Committee by the end of the second week of classes spring semester.

During the early part of spring semester, students should anticipate completing the data collection phase of their thesis and devoting significant time to data analysis and interpretation. If the thesis student has submitted an abstract to NEGSA or NCUR and that abstract has been accepted, with the guidance of their research mentor, students will prepare and give a presentation of their work at the relevant conference. This exercise should serve as a draft of the both the final thesis presentation and the final thesis itself. Thesis students must submit a final thesis draft to their thesis committee no later than one week before their final thesis presentation. Typically, the student will have submitted and received comments from their thesis advisor on each section of the thesis draft multiple times before the submission of this final draft to their committee. Senior theses in Geology are typically 30-50 pages in length, including figures and references.

No later than the final week of classes spring semester, thesis students will give a final thesis presentation sharing the results of their work with their committee, Geology Department faculty and students and any other guests who wish to attend. Students should prepare a ~30 minute presentation suitable for a general audience. The presentation will be followed by a questions and answer period open to all attendees, which is then followed by a closed door question and answer session with thesis committee members. After this session, the honors thesis committee will judge the quality of the thesis in accordance with the departmental rubric for senior theses (see Appendix B) determining

whether or not honors will be awarded and then inform the student of their determination. At this time, committee members will make any recommendations for revisions to the text of the thesis. The research mentor submits a completed "approval of thesis" form to the Academic Progress Committee after the senior thesis presentation. No later than seven days after the end of classes, final revised copies of the thesis with signatures of the thesis committee members should be submitted to the research mentor and to the department head.