The mathematics department requires that each senior complete a written thesis, which is presented in the spring semester to an audience consisting of the mathematics faculty, the senior majors, and guests. The thesis topic itself may be expository, or it may involve some original work. It is required, however, that the research includes some mathematics that the student has not previously encountered in a course. Occasionally a student will wish to continue a project begun as a summer research experience, but in this case there must be a demonstrable new component to the work. Students are encouraged to choose a thesis topic and adviser before the end of their junior year, and they are required to have selected an adviser by the first week of the fall semester. The adviser makes sure that the problem selected is appropriate, and suggests preliminary readings, preferably to be done in the summer preceding the senior year. During both the fall and spring semesters, it is expected that each senior will meet with their adviser at least once a week. In the fall, the student presents two informal short oral presentations, and completes both a thesis proposal and a rough draft of one section of the thesis. In addition, any simulation software for modeling must be implemented by the end of the semester, which often requires a significant amount of supervision. In the spring semester, all math faculty and seniors attend a weekly seminar in addition to weekly individual meetings. At this seminar, each student gives a more formal presentation the thesis, the final draft of which is due towards the end of the semester. Both the oral presentation and the written paper are expected to be of a high quality, and the adviser in general spends some time coaching the presentation itself, as well as providing extensive feedback on successive revisions of the thesis. The final draft is read by the adviser, with a second reader assigned in the case of exceptional work on either end of the scale.