

1077-C1-151      **Meredith L Greer\*** ([mgreer@bates.edu](mailto:mgreer@bates.edu)) and **Chip Ross** ([sross@bates.edu](mailto:sross@bates.edu)). *Senior Seminar, Across a Department and Across the Years*. Preliminary report.

The Bates College Mathematics Department provides two capstone experiences, each with different goals. One is a senior thesis, in which a student works one-on-one with a faculty member. Since 1998 we have also offered a senior seminar, which highlights group work and innovative presentation, and which is the subject of our talk. Typically more than half our majors select the seminar as their capstone. We compare overall departmental goals for the seminar with specific implementations by faculty members. We discuss the variations that occur as topics, class sizes, and even students' tastes change. We suggest structures for ensuring high levels of individual engagement within a group-oriented framework. Seminar participants produce papers, presentations, and other documentation of their work; we present samples of these to demonstrate the degree of mathematical achievement and independence we expect our students to gain. We report results from two forms of assessment: an assessment of our capstone options led by outside facilitators in 2010, and a recent 20-year survey of Bates alums who had been math and natural science majors. Above all, we hope to convey why the seminar experience at Bates continues to be a rewarding and enjoyable way to complete a major in mathematics. (Received August 10, 2011)