Kathryn Weld* (kathryn.weld@manhattan.edu). *Problem Seminar: A Capstone Course. Preliminary report.

At Manhattan College all senior Mathematics and Mathematics Education majors take a problem solving capstone course. This talk will address how such a course might build mathematical maturity and hone written and oral communication skills in a diverse student body with a broad range of individual ability, while at the same time create a supportive atmosphere that encourages students to enjoy mathematics. The talk will describe how to find problems of appropriate difficulty, how to grade these problems so as to develop individual student writing and simultaneously encourage collaborative work, how use of a knowledge survey has helped to identify key areas of weakness in the curriculum, and how the course encourages students to attend and give presentations at Undergraduate Conferences. (Received September 20, 2011)