“Specifications grading” as described in Linda Nilson’s recent book provides a framework by which an emphasis on rigor and student learning can be implemented in a way that students are motivated to succeed and achieve their goals. I have implemented a version of this in my Calculus I course that sets a high standard for demonstrating understanding (mastery) of concepts and procedures in calculus while providing multiple opportunities for success. Formative assessment is a prominent feature inherent in the course pedagogy that elucidates for students exactly what is required for mastery.

I will present the rationale for structuring the course this way, outline (and make available to those interested) the details of implementing specifications grading, and comment on the time demands/savings. Finally I will share student survey data I have gathered including student perceptions of the grading system, assessments, and the effect on developing growth mindset. I’ll focus on the Calculus I course, but everything can be easily applied to other courses. (Received September 12, 2015)