Abstract: One of the big frustrations Mathematicians often have with students is that they proceed from class to class learning just enough to pass, but not really enough to do Mathematics well. In this talk, I will introduce the idea of Mastery-Based Grading using standards. Instead of students learning just enough of all of it, students focus on learning all of just enough of it. Conversations change from the arithmetic of points accumulation to the calculus of how to do Mathematics well. Practiced around the country in everything from Pre-calculus through upper division Mathematics and Statistics (and other disciplines), this grading system is more aligned with current pedagogical understanding and the neuroscience of learning. Let students fail and then succeed, struggle and then learn, and get the material at their own pace (mostly). Instructors are no longer the gate-keeper of the grades, but the students own their own progress and learning.

Keywords: mastery-based grading, standards-based grading, growth mindset, productive struggle