

1145-VK-145      **Andrew A. Cooper\*** ([andrew.cooper@math.ncsu.edu](mailto:andrew.cooper@math.ncsu.edu)), Box 8205, North Carolina State University, Raleigh, NC 27695. *Content-Based Specifications Grading in a Proofs Course*.

Specifications grading is an approach to grading (popularized by Nilson's 2014 book) in which students are assigned term grades based on whether they meet binary (pass/fail) objectives, rather than accumulating points. One topic of frequent conversation has been how to implement specifications grading a proof-based major course, such as algebra, analysis, or linear algebra, which traditionally might have frequent homework assignments consisting mainly of proofs.

In this talk I will describe my experiences using a specifications system in a transition course and an undergraduate analysis course. The grading objectives are based on the learning objectives for the course; each relates to specific mathematical content. I will describe how I developed the grading objectives, how individual assignments are assessed, and the collation of each student's work into a final portfolio.

Throughout, I will provide evidence from student work and surveys, as well as anecdotes and my reflective impressions. I hope to convince you that, by adopting such a system, you can: improve the quality of student work; increase student satisfaction; greatly reduce grade-grubbing; instill mindfulness, good work practices, and pride; and (perhaps most critically) save yourself time and frustration. (Received September 25, 2018)