

1125-VR-2222 **Amanda J Mangum*** (amangum@niagara.edu), 5795 Lewiston Road, Niagara University, NY 14109. *Fostering Comprehensive Learning Through Concept Worksheets and Mastery-Based Testing*. Preliminary report.

This talk will discuss two methods utilized to encourage students to engage with the material from a Calculus I course in such a way that they leave the course fully understanding the key material and the concepts. Mastery-based testing was implemented in this course to reduce test anxiety and to encourage students to revisit material until they master it. (Students may re-take tests over concepts until they master them.) The second method implemented was assigning worksheets tailored to common misconceptions and mistakes seen in student work. These worksheets, completed either in class or as homework, should also help students process the material before they are tested over concepts. By actively working together to understand and to complete the worksheets, students can help each other comprehend the material at a deeper level. This talk will also discuss the shortcomings and challenges encountered with these approaches. (Received September 19, 2016)