

1125-VS-2760 **Randy Combs***, Box 60787, WT Station, Canyon, TX 79015. *Inverting the Advanced Calculus and Abstract Algebra Classrooms.*

In this paper we discuss one instructor's experience in using the inverted classroom structure to teach proof based, upper level Advanced Calculus and Abstract Algebra courses. The structure of the inverted classroom model allows students to begin learning the new mathematics prior to the class meeting. By front-loading the learning of a new concept, students can use valuable class time for exploring and solving complex problems with the instructor available for guidance and assistance. This paper compares student performance in the inverted classroom with student performance in the direct instruction classroom. The researchers also share student perceptions of the inverted classroom experience.

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