

1135-H1-2559 **Melissa Lindsey*** (melissa.indsey@dordt.edu), Dordt College, 498 4th Ave NE, Sioux Center, IA 51250. *Designing and assessing out-of-class activities in Technical Mathematics.*

Dordt College launched a professional and technical program (Pro-Tech) in the Fall of 2017 offering two-year programs in Manufacturing Technology and Farm Operations Management. The mathematics course for these programs has two main goals: to ensure that all students have a foundation of basic mathematics skills and to introduce students to the ways in which they can apply those mathematical skills to their chosen vocations. In order to accommodate a wide variety of mathematical backgrounds and to ensure optimum time for exploring applications, a flipped learning strategy was implemented in this course. An overview of how the course was structured will be discussed with an emphasis on how the out-of-class assignments were designed, created, and assessed. In particular, the talk will explain how the out-of-class activities provided students with the ability to learn the basic mathematics skills needed at their own pace and prepared them to explore applications of those skills during class time. Though conceived with a specific demographic of student in mind, the techniques mentioned are applicable to most lower-level mathematics courses. (Received September 26, 2017)