

1125-VP-3039 **Stephanie Thrash*** (sthrash@stedwards.edu) and **Nicole Buczkowski**. *Mathematical Analysis of Lottery Voting*.

Standard voting methods rely on deterministic social choice functions to aggregate voter preferences and determine a winner or set of winners. In contrast, lottery voting determines winners by randomly selecting voter ballots. In this presentation, we will investigate lottery voting from a mathematical perspective. In particular, we will provide insight into the effects of varying the size of the set of winners and potential strategies for political parties within the lottery voting system. (Received September 20, 2016)