

1135-B1-1340 **Steve Bacinski*** (sbacinski@davenport.edu), Davenport University, 6191 Kraft Ave SE, Grand Rapids, MI 49512. *The Ins and Outs of the Elo Rating System.*

Originally designed for chess players, the Elo rating system has now been extended and adapted to many other sports including basketball, football, soccer, and tennis. This powerful and self-correcting tool allows us to make predictions for upcoming games/matches, and compare teams across eras. We will explore the "ins" (fundamental assumptions and driving formulas to build the model) and the "outs" (interpretations and results) of the Elo rating system for various leagues, and include applications to the classroom. (Received September 21, 2017)