

1116-K1-1239 **Tim Chartier*** (tichartier@davidson.edu), Department of Math and CS, Davidson College,
P.O. Box 6908, Davidson, NC 28035. *Discrete sports modeling.*

Your students can find sports models and be discrete about it. This talk will present mathematical modeling techniques in the context of sports, with an emphasis on discrete math modeling. Sports vary and can include baseball, football, basketball or even mixed martial arts fighting. We'll also discuss a few problems posed to the presenter and his students by ESPN's Sport Science show. The talk will discuss the importance of building and evaluating a math model. Math techniques for our modeling playbook will include Monte Carlo simulation, linear algebra, statistics and probability. We will also discuss how such ideas can be adapted to contexts outside athletic performance. (Received September 18, 2015)