

1116-VP-524 **Karen M Holmes*** (kholmes@butler.edu). *A Few Game Examples from Win, Lose, or Draw
an Analytic Reasoning Course.*

Win, Lose, or Draw is a course created to fulfill the Analytical Reasoning requirement in the core at Butler University. The course covers many topics from logic puzzles to combinatorics to probabilities and expected value with an emphasis on games. The talk will concentrate on logic in the game Bulls and Cows and probability in both Risk and Poker. Bulls and Cows is a paper and pencil game version of Mastermind and examples of class logic problems will be presented. For Risk, the focus will be on dice and the probabilities of an attack ending in different outcomes depending on how an unknown die falls. Then the probabilities for the different Poker hands will be discussed, and then using a deck of pinochle cards, the probabilities will be reevaluated to emphasize the method. (Received September 05, 2015)