

Proposal

School: Portales High

Team Name: Black-Hat Golfers

Area of Science: Physics

Project Title: Using Applied Physics to create a 2-D Golf game.

Our project will apply physics equations to create a two dimensional golf game. Physics is always being used, but difficult to understand.

The project is centered around simplicity and understanding. We want to make the game as simple as possible for the user while showing the user key roles that physics takes in golf. Also, to provide a fun game that doesn't require intense thought. Golf is a prime example of what Physics is all about. There are many different things that factor in.

In most physics class, you are taught to calculate motion, ignoring the complicated variables. i.e. surface area, drag, friction, air resistance, ect. Our goal is to create a realistic, yet simplistic, 2-D projectile physics engine that is then used to run a golf game. This game will take into account every variable in projectile motion, starting with the basics, angle, velocity vectors, and gravity. What makes this program special is that we will also be taking into account drag based on the surface area of the ball and the density of air. The magnus effect, which is the change in velocity caused by the spin put on a ball. Randomly generated weather conditions. All to create a more accurate, yet simple, golf game.

Team Members:

- Edward Newell
- Antonio Aldaz
- Jesus Castillo
- Harley Bendzus