INNOVATN GAMES

Google   **AP Austin Peay State University**

Level 1 Drone Challenge (5th - 8th Grade)
- 20-25 Teams
  Coach(s)
  3-8 Team Members
- Two separate challenges
  Challenge 1 – Fly a Flybrix drone through a course for the fastest time
  Challenge 2 – Program a Tello Drone to fly through a course autonomously for the fastest time

Coaches will...
- Receive 2 Tello EDU and 2 Flybrix drone kits
- Introduce students to drones
- Coach students on a drone skills test
- Introduce students to coding techniques to program the drone

Level 2 Drone Challenge "Monocle Mercy" (9th - 12th Grade)

- 8 Teams
  Coach(s)
   3-8 Team Members
- Teams will have to build their drone and engineer a mechanism to attach to their drone for picking up items
- Based on a real world natural disaster event teams will be challenged to complete as many missions as possible in a 5 min time period
- Missions will be assigned points based on complexity

Coaches will...

- Receive the necessary parts and equipment to build out 2 drones
- Introduce students to drone technology
- Stress problem solving via STEM
- Introduce Basic Engineering and Project Management

DRONE COMPETITION
April 18, 2020

Level 3 Drone Challenge "Drone Quidditch" (HS and up)

- Six Teams
  Coach
  5-8 Team Members
- Teams will have to build their drones as well as engineer and attach a 360 spherical cage around the drone.
- Two teams will face off in a 30x60 pitch field.
- Each team will field 5 drones (1 striker, 4 defenders)
- Each team will have one drone identified as their striker drone which must fly through a scoring hoop to score points.

Coaches will...

- Receive enough parts and equipment to build out 6 drones
- Introduce students to drone technology
- Stress problem solving via STEM
- Introduce Basic Engineering and Project Management