



Printable Course Overview

Course: UFO or UAV: The Big Wide World of Drones
[Simulator]

Grade Levels: 6th-8th

Time Required: 15x 1-hour class periods

Course Description

What exactly is a UAV? How do they work? What are they used for? Believe it or not, the first working drone was built in 1935 by the British military for target practice and looked like an airplane. One of the more successful models, the De Havilland Queen Bee, is where the word "drone" stems from. Since then, drones have been used for surveillance, deliveries, search and rescue, wildlife monitoring, journalism, disaster response, mapping, and more. They are complex machines that use programming to maneuver them wherever they are needed. This course introduces drone mechanics and allows students to program drones using the NWS Drone Simulator software. The sky's the limit with drone technology.

Required Materials

- Lesson presentations
- Lesson printables
- Lesson plans
- Computers/tablets with internet access
- Access to school-approved search engines
- Access to NWS Drone Simulator Software
- Connection to projector for display of videos and presentations

Curriculum Overview

Units can be taught in the suggested sequence below or on their own.

Lesson Title	Technology Required
1: UFO or UAV? What is a drone?	NWS Drone Simulator, Computer, or tablet, Wifi connection
2: NWS Drone Simulator Introduction: Basic commands and coordinates	NWS Drone Simulator, Computer, or tablet, Wifi connection
3. NWS Drone Simulator Introduction: Loops	NWS Drone Simulator, Computer, or tablet, Wifi connection
4: NWS Drone Simulator: Variables	NWS Drone Simulator, Computer, or tablet, Wifi connection
5: NWS Drone Simulator: Functions	NWS Drone Simulator, Computer, or tablet, Wifi connection
6: Fighting Climate Change with Drones	NWS Drone Simulator, Computer, or tablet, Wifi connection
7. Disaster Master	NWS Drone Simulator, Computer, or tablet, Wifi connection
8: Reading, Writing, and the Movies	NWS Drone Simulator, Computer, or tablet, Wifi connection
9: Reading, Writing, and the Movies: Part 2	NWS Drone Simulator, Computer, or tablet, Wifi connection
10: Opening Night	NWS Drone Simulator, Computer, or tablet, Wifi connection
11: Skywriting Using Drones	NWS Drone Simulator, Computer, or tablet, Wifi connection
12: Mapping Using Drones	NWS Drone Simulator, Computer, or tablet,

	Wifi connection Tello App
13: On My Own, Part 1	NWS Drone Simulator, Computer, or tablet, Wifi connection
14: On My Own, Part 2	NWS Drone Simulator, Computer, or tablet, Wifi connection