

Aviation (STEM) Year 1

Instructor: Jeff Curtis

Grades: 9th - 12th

Prerequisite: None

Fees: \$40 per month tuition, plus a one-time \$40 Supply fee

Textbook: Materials Provided

Course Description:

This course is designed to introduce high school students to all types of aviation careers, as well as introduce them to the science of flight thru STEM activities and lessons.

The AOPA curriculum information can be found at [High School Aviation STEM Curriculum - You Can Fly \(aopa.org\)](https://www.aopa.org/education/curriculum)

1st Semester – Launching Into Aviation

The ninth-grade course provides the foundation for advanced exploration in flying, aerospace engineering, and unmanned aircraft systems. Students will learn about engineering practices, problem-solving, and the innovations and technological developments that have made today's aviation and aerospace industries possible.

Students will look at the problem-solving practices and innovative leaps that transformed space exploration from the unimaginable to the common in a single generation. Students will also gain a historical perspective, from the earliest flying machines to various modern aircraft.

2nd Semester – Exploring Aviation and Aerospace

This core aerospace and aviation course provides the foundation for both pathways and gives students a clear understanding of career opportunities in aviation and aerospace and the critical issues affecting the industry. Students will also begin to drill down into the various sectors of aviation and the elements that make up the aerospace ecosystem.

They will discover how advances in aviation created a need for regulation and learn about the promulgation of civil aviation oversight. Students will explore modern innovations and develop innovative ideas to address the aviation industry's real-world challenges.

They will be exposed to various career options in aviation and aerospace and take an in-depth look at available opportunities.

Instructor Bio:

Jeff Curtis is a husband and father of 2 teenagers. Retired from the US Air Force in 2019 as a Lieutenant Colonel after 20 years of service. Graduate of the US Air Force Academy, with a degree in Basic Science. Master of Business Administration from American Military University. Taught Junior Reserve Officer Training Corps at Midwest City HS for 3 years after retiring from the Air Force.