

Aviation Careers II

Career Cluster	STEM
Course Code	20057
Prerequisite(s)	Aviation Careers 1
Credit	.5 or 1
Program of Study and Sequence	Foundation Courses, Cluster Courses, Pathway Courses, Capstone Experiences
Student Organization	Skills USA
Coordinating Work-Based Learning	local airports, Fixed Base Operators, National Guard, Civil Air Patrol, Experimental Aircraft Association
Industry Certifications	Private Pilot or Part 107 - Drone Certifications
Dual Credit or Dual Enrollment	TBD
Teacher Certification	STEM Cluster Endorsement; Aviation Pathway Endorsement; 7-12 Technology Education Endorsement
Resources	https://www.faa.gov/education/ https://www.faa.gov/education/educator_resources/curriculum/high_school/ https://www.osha.gov/SLTC/airline_industry/ https://youcanfly.aopa.org/high-school/high-school-curriculum https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/

Course Description: This course provides students with the final step towards a Private Pilot’s license or Part 107 - Drone Certification. Students will learn about the flight environment, weather in aviation, airports, navigation/aeronautical charts, aircraft performance, flight medical issues, possible career paths within the aviation industry, and Federal Aviation Agency regulations.

Program of Study Application

Aviation is a pathway course in the aviation pathway. Students in this pathway would generally complete foundation courses and one of the STEM cluster courses prior to participating in aviation.

Course Standards

Indicator # AVC-2 1 Applying the principles of flight		
<i>Webb Level</i>	<i>Sub-indicator</i>	<i>Integrated Content</i>
Level 3: Strategic Thinking	AVC-2 1.1 Utilize the parts and control surfaces on an aircraft in flight	
Level 3: Strategic Thinking	AVC-2 1.2 Utilize the four forces of flight	
Level 4: Extended Thinking	AVC-2 1.3 Utilize aerodynamics in flight	
Level 3: Strategic Thinking	AVC-2 1.4 Implement airplane stability while in flight	
Indicator # AVC-2 2 Operating in a safe flight environment		
<i>Webb Level</i>	<i>Sub-indicator</i>	<i>Integrated Content</i>
Level 3: Strategic Thinking	AVC-2 2.1 Practice air safety	
Level 3: Strategic Thinking	AVC-2 2.2 Implement proper procedures at the airport	
Level 4: Extended Thinking	AVC-2 2.3 Practice working in different airspaces	
Level 3: Strategic Thinking	AVC-2 2.4 Implementing proper radio communications	

Indicator # AVC-2 3 Utilizing aircraft systems and performance		
<i>Webb Level</i>	<i>Sub-indicator</i>	<i>Integrated Content</i>
Level 3: Strategic Thinking	AVC-2 3.1 Implement proper use of aircraft instruments	
Level 3: Strategic Thinking	AVC-2 3.2 Implement proper use of aircraft systems	
Level 3: Strategic Thinking	AVC-2 3.3 Evaluate and respond to aircraft performance during flight	
Level 3: Strategic Thinking	AVC-2 3.4 Calculate weight and balance	
Indicator # AVC-2 4 Utilize the relationships between weather and flight for safety		
<i>Webb Level</i>	<i>Sub-indicator</i>	<i>Integrated Content</i>
Level 3: Strategic Thinking	AVC-2 4.1 Apply basic weather theory to flights	
Level 2: Skill/Concept	AVC-2 4.2 Describe weather patterns and clouds	
Level 3: Strategic Thinking	AVC-2 4.3 Assess weather hazards	
Level 3: Strategic Thinking	AVC-2 4.4 Interpret weather data	
Level 3: Strategic Thinking	AVC-2 4.5 Utilize sources of weather information	

Career Cluster: STEM

Course: Aviation Careers II

Indicator # AVC-2 5 Implement navigation in flight		
<i>Webb Level</i>	<i>Sub-indicator</i>	<i>Integrated Content</i>
Level 3: Strategic Thinking	AVC-2 5.1 Implement proper navigation skills	
Level 3: Strategic Thinking	AVC-2 5.2 Utilize dead-reckoning and pilotage	
Level 3: Strategic Thinking	AVC-2 5.3 Utilize a flight computer	
Level 3: Strategic Thinking	AVC-2 5.4 Utilize aeronautical charts	
Level 3: Strategic Thinking	AVC-2 2.4 Implementing proper radio communications	

Indicator # AVC-2 6 Understand aviation physiology		
<i>Webb Level</i>	<i>Sub-indicator</i>	<i>Integrated Content</i>
Level 3: Strategic Thinking	AVC-2 6.1 Examine and understand the effect on the body in the flight environment.	

Career Cluster: STEM

Course: Aviation Careers II

Indicator # AVC-2 7 Understand FAA Regulations and Required Flight Paperwork		
<i>Webb Level</i>	<i>Sub-indicator</i>	<i>Integrated Content</i>
Level 3: Strategic Thinking	AVC-2 7.1 Examine and understand the current FAA regulations for flight	
Level 3: Strategic Thinking	AVC-2 7.2 Utilizing flight paperwork	

Indicator # AVC-2 8 Explore the multiple careers in aviation		
<i>Webb Level</i>	<i>Sub-indicator</i>	<i>Integrated Content</i>
Level 3: Strategic Thinking	AVC-2 8.1 Investigate aviation career fields and occupations.	