

AOPA FOUNDATION HIGH SCHOOL AVIATION STEM CURRICULUM
PACING GUIDE



YOU CAN FLY
 AOPA FOUNDATION
 HIGH SCHOOLS



NINTH GRADE CURRICULUM
 EXPLORING AVIATION AND AEROSPACE
 SEMESTER TWO

Unit 6: Aviation Safety and Oversight

	No. of Sessions Per Lesson	Day of Semester
<u>Pre-Course Exam</u>	1	1
<u>Section A – Role of Government in Aviation Safety</u>		
Lesson 1 Fundamentals of Aviation Safety	2	3
Lesson 2 The Federal Aviation Administration	2	5
<u>Section B – Accident Investigation</u>		
Lesson 1 The Investigative Process	3	8
Lesson 2 Accident Case Study	3	11
<u>Section C – Aviation Weather Services</u>		
Lesson 1 Aviation Weather Reports and Forecasting	2	13
<u>Unit 6 Exam</u>	1	14
Total Sessions Unit 6	14	
Semester Total	14	

*If the course is off pace for your school/schedule, we recommended that lessons denoted by an asterisk could be shortened or skipped.
 updated 7.20.21

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Unit 7: Exploring Careers in Aviation and Aerospace

		No. of Sessions Per Lesson	Day of Semester
<u>Section A – Flying</u>			
Lesson 1	Flying Aircraft and Drones	4	18
<u>Section B – Engineering</u>			
Lesson 1	Becoming an Aerospace Engineer	2	20
<u>Section C – Other Great Aviation Careers</u>			
Lesson 1	Becoming an Air Traffic Controller	2	22
Lesson 2	Becoming an Aircraft Mechanic	1	23
<u>Unit 7 Exam</u>		1	24
Total Days Unit 7	10		
Semester Total	24		

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Unit 8: Aviation Innovation and Problem Solving

		No. of Sessions Per Lesson	Day of Semester
<u>Section A – Going Green</u>			
Lesson 1	Reducing Aviation’s Environmental Impact	3	27
<u>Section B – Modernizing Airspace</u>			
Lesson 1	Next Generation Air Transportation System	1	28
Lesson 2	Integrating Drones	3	31
<u>Section C – Future Aircraft</u>			
Lesson 1	Supersonic Aircraft	3	34
Lesson 2	Autonomous Aircraft	3	37
Lesson 3	Electric Aircraft	2	39
<u>Section D – Future Space Travel</u>			
Lesson 1	Colonizing Space	3	42
<u>Unit 8 Exam</u>		1	43
Total Days Unit 8	19		
Semester Total	43		

*If the course is off pace for your school/schedule, we recommended that lessons denoted by an asterisk could be shortened or skipped.

updated 7.20.21



Unit 9: Innovation Challenge

	No. of Sessions Per Lesson	Day of Semester
<u>Section A – “Peep Odyssey”</u>		
Lesson 1 “Peep Odyssey” Innovation Challenge	12	55
Total Sessions Unit 9	12	
Semester Total	55	

PROPRIETARY

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Unit 10: Thinking About a Career in Aviation

		No. of Sessions Per Lesson	Day of Semester
<u>Section A – Preparing for an Aviation Career</u>			
Lesson 1	Developing a Mission Statement*	2	57
Lesson 2	Investigating Education Options After High School*	2	59
<u>Section B – Developing Professionalism</u>			
Lesson 1	Professional Skills and Conduct*	2	61
Lesson 2	Building Communication Skills*	2	63
<u>Section C – Career Planning Project</u>			
Lesson 1	Building a Career Portfolio*	5	68
<u>Unit 10 Exam</u>		1	69
Post-Course Exam		1	70
Total Days Unit 10	15		
Semester Total	70		

*If the course is off pace for your school/schedule, we recommended that lessons denoted by an asterisk could be shortened or skipped.
 updated 7.20.21