

Aviation Program Update

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A Look Back...

In 2022,

- Legislation was amended to include Aviation in graduation requirements.
- Subject codes were added for Aviation courses.
- OSDE published guidance documents to support districts in implementation of Aviation programs.

First presentation of the Aviation Program was in Spring 2023.



Why (Still) Offer Aviation?

- Aviation is a **dynamic industry** in Oklahoma with over 300 public and private companies in the OKC area and at least 200 in the Tulsa area.
- It is a high-demand industry that provides students with various **postsecondary, career, and military opportunities**.
- The aviation pathway meets **ICAP requirements**, which are also required for graduation.
- The aviation pathway provides a great opportunity for **partnerships within our community**.



Curriculum Pathways

	Aviation I	Aviation II	Aviation III		Aviation IV	
Pilot 	Launching into Aviation and Exploring Aviation and Aerospace	Introduction to Flight and Aircraft Systems	The Flying Environment	Navigation & Human Factors	Aviation Safety Private Pilot Certification Exam Option	Pilot Capstone Project
UAS 	Launching into Aviation and Exploring Aviation and Aerospace	Introduction to Flight and Aircraft Systems	The Flying Environment	UAS Theory & Operations	UAS Design & Operations Part 107 Certification Exam Option	UAS Capstone Project



Aviation Course Offerings - Year 1

SJHS and SHS offer Aviation I and II courses to 9th - 11th grade students starting in SY23-24 with enrollment occurring in Spring 2023.

	9th Grade	10th Grade	11th Grade	12th Grade
Aviation I	✓	✓	✓	
Aviation II		✓	✓	
Aviation III				
Aviation IV				



Aviation Course Offerings - Year 3

SHS offers all Aviation II - IV courses for 10th - 12th grade students. Aviation IV is a Capstone course.

Students select a focus pathway: **Pilot** or **UAS**.

	9th Grade	10th Grade	11th Grade	12th Grade
Aviation I	✓	✓	✓	
Aviation II		✓	✓	✓
Aviation III			✓	✓
Aviation IV			✓	✓



Enrollment in Years 1 and 2

SY23-24	SY24-25	*SY25-26
AV I - 44	AV I - 45	AV I - 69
AV II - 43	AV II - 59	AV II - 66
	AV III - 28	AV III - 24
	AV IV - 2	AV IV - 10
Total - 87	Total - 134	Total - 169

*These numbers are based on student requests.



Postsecondary Prep

Because of the Aviation program, students are

- Taking flight lessons with local businesses.
- Interning with OSU in CEAT and UAS programs.
- Interning and job shadowing within the aviation industry.
- Starting flight lessons and flight school at earlier ages.
- Working toward aviation careers in a variety of ways.



Class Insight - Aviation I - SJHS



Students use the engineering design process to build a hot air balloon after learning about lift and drag, among other aviation concepts.



Class Insight - Aviation I - SJHS

SJHS Students design, build, and compete at OSU's Speedfest!



Class Insight - Aviation III - SHS



Field trip to the Stillwater Regional Airport to see the ARF and hear about its functionality.

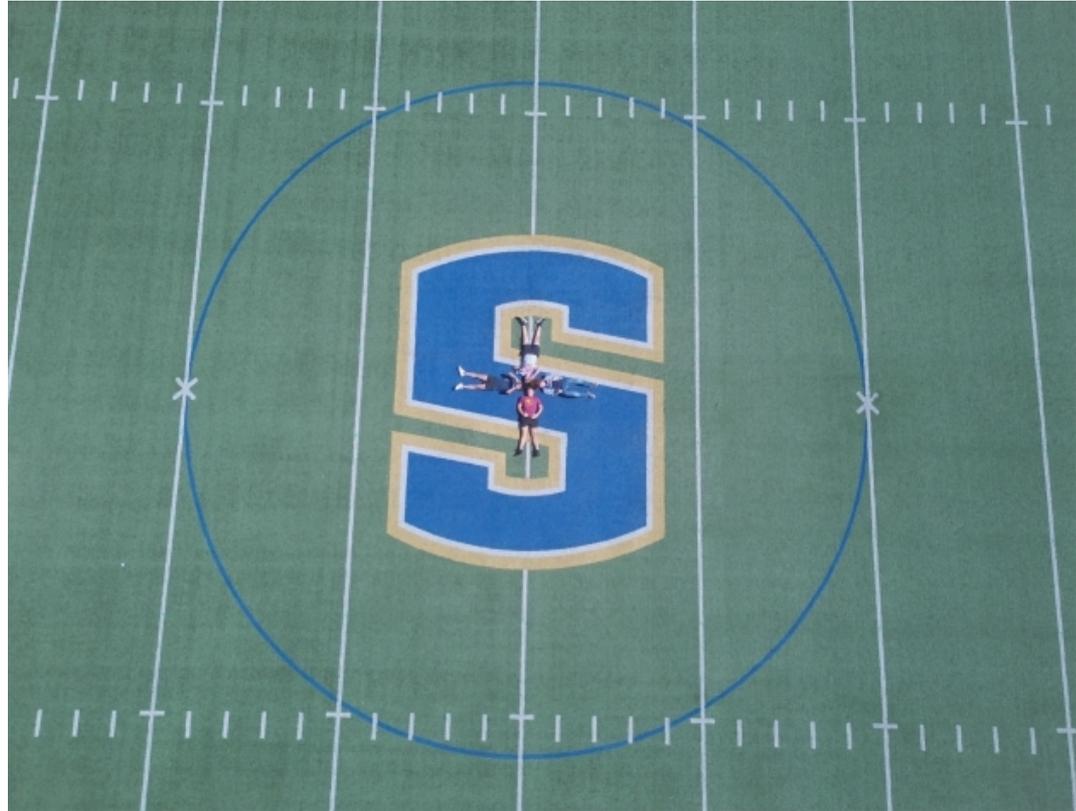
Thanks City of Stillwater!



Class Insights - Aviation III - SHS

Drone class students practice aerial coverage of the SHS football field.

Can you find them?



Class Insight - Aviation III - SHS



Students work in groups to design airport models. This project builds on various skills learned in Aviation II and III.



Educator Highlights

SJHS - Mr. Adam Welsh

- NASA OKSG Speedfest Educator
- NASA OKSG STELLAR Summer Institute - total of 280 hours
- FAA Advanced Ground Instructor Certificate - Feb. 2024
- FAA Part 107 Remote Pilot Certificate Recurrent training/test - May 2024
- FAA Private Pilot License (refresher training) - In progress



Educator Highlights

SHS - Mr. Larry Hesler

- AOPA You Can Fly Curriculum PD - Training in Aviation II, Aviation III, and Aviation IV
- Attended AOPA training at Maryland headquarters
- FAA Part 107 Remote Pilot Certificate Recurrent training/test - May 2024
- AP Statistics teacher and Math Department head



Funding

- **SPEF** has donated **\$40,000** to supply the program with 5 simulators, Echo drones, and drone build kits to support the Aviation II and III classes.
- **Oklahoma Dept of Aeronautics and Aviation Grant** has awarded a total of **\$19,000** to supply the program with a wind tunnel, drone cage, aviation-logo apparel for students, airplane engine parts, and a flight simulator for the JH.
- **Oklahoma Dept of Aeronautics and Aviation** awarded a 1-time **\$20,000** Classroom Lab Grant for storage cabinets, modular tables, and chairs at the JH and HS.



Funding

- A portion of STEM **CareerTech 412** funds are used to support the JH Aviation program.
- SJHS applied for a **\$14,000 CareerTech Comprehensive Grant** for SY25-26.
- SPS continues to seek grants and donations to support the Aviation program.



Next Steps

- There are continued demands from local industry businesses and the aviation industry for **certified aviation mechanics**.
- We are thankful for the generous donations and support of local partnerships, but we need to work toward **sustainability**.
- We want to continue to partner with stakeholders connected to the aviation industry to provide our **students with opportunities**.

