

WPAFB Educational Outreach



INSPIRING STUDENTS IN STEM

September 2019

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...Join Us Next Month

- Job Shadow Day
- FRC Off Season
- AF STEM event



K-12 STEM ENQUIRER

FIRST® Tech Challenge

On September 7th, thirty *FIRST*° Tech Challenge teams from around the Dayton/ Cincinnati area joined for a day of workshops, collaboration, and the reveal of 2019-2020 game...SKYSTONE. This season students are pushing the *FIRST* city forward and up into the skies – and shifting the way we think about our place in the galaxy. In this process, teams of 7th -12th graders will join the 100 teams in Ohio and the thousands of teams throughout the world in trying to build the best robot to complete the challenge and inspire more students to get involved in STEM. Students will prototype, build, and program robots up to 42 lbs and 18" square to accomplish this year's robotic task. The robots will need to work as a team against two other robots to collect and stack Stones and Skystones to create a skyscraper and then place a capstone atop the skyscraper and move it to the building site. This program will have competitions from December - February 2020 and will culminate in the State Championship in Loveland, OH on 14 March. If you are interested in helping with a team (or with the competitions) please contact the Educational Outreach office!





LEGACY Overview

LEGACY is gearing up for 2020! Students, ages 11-15, interested in hands-on STEM activities can apply from January 1, 2020 to March 1, 2020. LEGACY Craftsman Camps are one-week camps which will occur in the summer of 2020. Craftsman Camps are free! More information and applications can be found at this link http://wpafbstem.com/pages/legacy.html.



Introducing...WOW! Do It Yourself

We offer the *Wizards of Wright* program to help teachers bring more STEM into their classrooms.

WOW! in the Classroom: Invite one of our Wizards (WPAFB professionals with an interest and expertise in STEM) to your classroom to present demonstrations and hands-on activities. All demo scheduling is based on volunteer availability and is limited to a 35 mile radius of WPAFB.

WOW! on Wheels: Borrow WOW! materials to present our demos, run your own labs and activities, and supplement your lessons. WOW! on Wheels materials can be delivered to you and will be picked up when you're done. All scheduling is based on material availability and is limited to a 35 mile radius of WPAFB.

WOW! TV: When deciding on one of our demos, or when prepping to present it yourself, use one of our videos.

And Now...we are happy to offer a new WOW! flight for families. **WOW! DIY** introduces easy, inexpensive activities that can be done with items typically found in the home. Families can download an instruction sheet and also watch corresponding How-To videos.

We currently offer the following titles:

Budding Bacteria
Catapult Chaos
Magic Sand
Marble Print
Model Lung Activity
Robotic Arm End Effector
Simple Magnetic Motor
Slime Time

Cool Chromatography
Density Diversions
DNA Extraction
Filter Fix
Hovercraft
pH Indicator
Rainbow Density
Reaction Time



Please visit our website to see everything we offer. http://wpafbstem.com/With questions, or for more information on WOW!, call or email Angel Callahan.





