

WPAFB Educational Outreach



INSPIRING STUDENTS IN STEM

August 2020

Daniel J. Andrews

WPAFB K-12 STEM Coordinator Engineering and Technical Management Directorate, AFRL/EN 2261 Monahan Way, Bldg. 196 Wright-Patterson AFB, OH 45433 daniel.andrews.1@us.af.mil

In This Issue...

Pg.

Virtual School Year	1
FLL Rookie Camp/Season	2

Wright-Patterson AFB Educational Outreach



WPAFBSTEM.com

...Join Us Next Month

- FIRST updates
- FTC kickoff
- STARBASE 1st day of school

http://wpafbstem.com/pages/k12programs.html

K-12 STEM ENQUIRER

Virtual School Year

Although the 2020-2021 school year looks a little different than in years past, we want you to know that we are prepared to support our programs virtually!

LEGACY

LEGACY completed a virtual summer at four sites: WPAFB, Eglin AFB, US Air Force Academy, and Hill AFB. LEGACY ran twenty virtual Craftsman Camps across these with 250+ students attending from ages 11-15. These students participated in hands-on STEM activities with LEGACY provided materials, as well as learning computer programs such as SketchUp, Learn to Code, and Scratch. Additionally across all sites, LEGACY employed 80 Jr Apprentices and Apprentices that completed virtual internships including real world research, team building opportunities, and professional refinement courses. http://wpafbstem.com/pages/legacy.html

FIRST

FIRST LEGO League Explore, FIRST LEGO League Challenge, and FIRST Tech Challenge teams across the state are meeting in-person and virtually to meet this season's robotics and research challenges. Our Program Managers are working on remote qualifiers and championship events that will allow all teams to participate in engaging and high-quality competitions where they will get to interact with other teams, get feedback from judges and referees, and compete for awards and advancement opportunities. http://wpafbstem.com/pages/k12_FLL_overview.html

WOW!

Schools in our area are holding their classes in a variety of settings: in-person, online, and even hybrid options. To support schools, we will continue to offer our WOW! Flights and are introducing Wow! Remote Lessons to meet the STEM needs of our schools who may not be able to invite Wizards into their classrooms this year.

http://wpafbstem.com/pages/wow_overview.html

STARBASE

STARBASE has risen to the challenge presented by the start of this school year! With some creativity and cooperation with participating schools, we have come up with a plan to serve as many students as we can. Instead of hosting students in our building, we will be STARBASE on Wheels for at least the first quarter of the school year. We have been invited into three Beavercreek elementary schools to provide half days of hand-on, mind-on activities and are welcoming the challenge of the rest of the school year! Stay tuned! http://wpafbstem.com/pages/k12_starbase_overview.html

Classroom Speakers, SEMEDS, Job Shadow Day, Science Fairs, and more

We continue to survey our teachers, schools, and volunteers to make sure we are doing everything we can to meet STEM needs during this unique school year, providing remote opportunities for our volunteers to connect with area schools as much as possible.



FIRST® LEGO League - Rookie Camp and Remote Season

This summer has been a bit different for our *FIRST*® LEGO League program. Rather than our traditional summer rookie team camp, we have found some creative ways to support new teams. Brenda has spent time presenting virtually to teams over Zoom. She has also arranged opportunities for local FLL and high school FTC teams to connect individually with the teams to get them off to their best start with regards to robot design and programming. While it hasn't had the same feel as our typical camp, it has actually allowed us to work with teams who live further away and wouldn't have been able to participate, and the impact has been the same – the teams feel confident about getting their season started.

Speaking of the season, we are embarking on new territory for the season as well. To best protect our students, their coaches, and our volunteers, FIRST LEGO League in Ohio will be fully remote this season. We are in the process of preparing for remote qualifying tournaments in December and a remote Championship in early 2021. To help teams prepare and to train volunteers, we will be hosting a variety of online workshops and opportunities throughout the season. Already, we have run or collaborated to offer multiple focused workshops on topics like Tackling the Innovation Project and the FIRST LEGO League Core Values. Upcoming workshops cover Programming and Building a Better Bot. More virtual workshops and training opportunities will take place this fall.

We are excited to work with our teams and are finding fun ways to keep the teams engaged and learning. With the support of our volunteer referees and judges, we are excited to put on high quality remote events to inspire and encourage kids across Ohio to stay excited about and pursue STEM!

Special thanks to these veteran teams for their leadership in the season's webinars so far: FTC 3311 Innovators Robotics (Dayton), FTC 8 to Automate (Dublin), and FLL 2751 Lego Legion (Cincinnati).











