



UNITED STATES
AIR FORCE ACADEMY

USAFA K-12 STEM Outreach Program Newsletter

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United States Air
Force Academy and
Air Force STEM
webpages

<https://www.usafa.edu/stem-outreach/>

<http://www.usafa.af.mil/>

<https://afstem.afciviliancareers.com/>



QR Code for USAFA K-12 STEM
Outreach page

Introducing Science Pals

Would your students enjoy writing to a science pen pal? If so, have your students write letters to cadets in the STEM Outreach Club! Letters may be hand written or sent as one computer document. Students should introduce themselves in the first letter. Students may correspond several times during the year asking various science questions. Classes may adopt one cadet if they wish. At the end of the year, cadets might choose to FaceTime or Skype with your class. Send snail mail correspondence to Sandy Lamb @ Office of Research, 2354 Fairchild Hall, Suite 2H29, USAF Academy 80840 or email correspondence to sandra.lamb.ctr@usafa.edu.

Elementary Classroom Program – STEM Fridays

The STEM Outreach Coordinator will come to elementary classrooms to conduct a free, hands-on engineering or robotics activity that relates to lessons being taught. The goal is to help students understand the practical applications of what they are learning. Classroom teachers must be present during the lesson and active in assisting students.

USAFA Visits

When requesting a visit to one of our research centers, plan on a Wednesday or Thursday. Tours are available in these labs after 9:00AM: Aeronautics, Applied Mechanics, Astronautics, Chemistry, Computer Science, Human Performance and Physics. Observatory tours are available once a month at sunset.

USAFA Lending Library

These items are available for check-out for up to an 8 week period:
16 Mindstorms EV3 Kits - Building and programming robots suitable for 4th grade and up



6 WeDo 2.0 kits - Building and programming robots suitable for K-3 students
This kit is Bluetooth compatible with computers, tablets, and iPads.



USAFA K-12 STEM Outreach Mission

The United States Air Force Academy Science, Technology, Engineering, and Math (STEM) Outreach Program mission is to offer a variety of programs and services that effectively engage, inspire, and attract the next generation of STEM talent.

Contact Us

USAFA Office of Research

The Office of Research strives to build a positive relationship with K-12 students and educators and encourage recruitment/growth of future cadets to develop skills implicit to national security and the nation's competitive edge.

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Dr. Jim Solti
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6 Cubelet Six - Robot construction system designed for budding innovators ages 6 and up



Cubelet sets

15 Ozobot Starter Sets - Robots controlled by color for ages 7 and up



3 BB-8 robots - An app controlled droid for ages 10 and up



8 Spheros SPRK+ robots - Robots controlled by phone or tablet app for ages 10 and up



6 Keva Contraptions Sets - Wooden planks that can build endless creations for ages 5 and up



8 Gizmos and Gadgets - Create a variety of science contraptions that work for ages 8 and up



9 Snap Circuit Sets - Electronic discovery kit for ages 9 and up



14 Code-a-pillars with extensions - Introduces coding by allowing K-I students to rearrange caterpillar segments for different movements



Code a Pillar sets

3 Dash Robots - Toy robots that make coding fun using apps on iPads, phones or Android tablets suitable for K-4 students



3 Dot & Dash Wonder Packs – Teach K-4 students how to code robots



20 Molymod organic/inorganic molecular model student sets for middle and high school students

2 Molymod organic/inorganic molecular model teacher sets



2 Portable Wind Tunnels - Allow middle and high school students to test model designs



Email sandra.lamb.ctr@usafa.edu to reserve items. Checking out and returning lending library items will occur on Wednesday or Thursday afternoons at 4:00PM in the USAFA North Gate / Santa Fe Trail parking lot.