

UAH AIAA Community Outreach

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I. Overview

The University of Alabama in Huntsville's American Institute of Aeronautics and Astronautics student chapter (UAH AIAA) has worked diligently during the past year in increasing the STEM opportunities provided to local elementary and middle school students.

II. SOUP: STEM Outreach at University Place

This year, the UAH AIAA student chapter started an outreach program entitled SOUP, STEM Outreach at University Place. This program is focused on inspiring sixth grade students at a title one school to reach for their true potential. Every quarter, AIAA volunteers go into all three sixth grade classrooms and host a lab activity day where the sixty students get to work hands on with science topics they are learning about in class. During their labs, students are split into small groups where they receive one on one attention and a personal introduction to the STEM world. The goal of this program is to not only help students develop an interest in science, but it is also to ignite a passion to pursue their dreams. Our program and volunteers help the students realize that they are smarter than they know, and with hard work and dedication, they can make anything happen.

During the first SOUP lab day on December 9th, students learned about tectonic plates, volcanos, rock formations, and earthquakes. The second activity on March 11th taught students about moon phases, Earth's rotation, constellations, and rockets. The final visit of the year will take place in early May. UAH AIAA also plans to host a family event day on campus in May. This event day will help to get the parents involved so they continue the work the students do at school and in the program at home.

III. ARISS: Amateur Radio on the International Space Station

AIAA teamed up with the Space Hardware Club to work on a project called ARISS. After a three year hiatus, the Space Hardware Club applied for and was granted a contact for spring 2016. Since they had access to their own ground station radio equipment, they opted for a direct contact in order to be more involved in the radio side of the contact. Three local 8th grade classrooms and a local homeschool group were selected to participate directly in the project. Each classroom was visited twice before the contact to teach the students about the International Space Station, Amateur Radio, and to prepare the students for the radio contact. During the roughly 10 minute contact, 10 students got to ask 18 questions, which were answered by US Astronaut Tim Kopra.

IV. Girls' Science and Engineering Day

AIAA also participated in the Girls' Science and Engineering day in October. This event was sponsored by UAH and aimed at bringing more girls into the STEM field. This event was attended by more than 100 girl's grades 5-8.

V. Science Olympiad and Greater Paper Airplane Contest

In February, AIAA participated in Science Olympiad, a science and knowledge competition hosted at UAH. AIAA co-hosted the Pictionary event where teams had to draw a representation of a science theory while other teammates try to guess its name based on the drawing. AIAA also sponsored the Greater Paper Airplane Contest where students of all ages get together to design, fly and test paper airplanes.

VI. Summary

UAH AIAA's goal of encouraging pre-college students to pursue a career in STEM was realized through these outreach projects. In the future, the chapter would like to expand these programs to reach even more students. Plans have already been started to continue SOUP every year and to repeat ARISS again in three years.

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