

# MUSEUM EDUCATION CURRICULUM

#### CORE-BASED SCIENCE LESSONS



# Tilt of the Earth

Join our Air Force team in learning about patterns in our solar system and how they affect the weather seasons worldwide! Programming emphasizes how days, months, and years occur in connection with those patterns. Aligns with Utah SEEd Standard 1.1.2, 45 minutes.



### Crazy Chemistry SECOND GRADE

Investigate the uses of reversible and irreversible changes in matter as we change substances or combine them to create something totally new! Programming aligns with Utah SEEd Standard 2.3.4, 45 minutes.



## Newton's Laws THIRD GRADE

Learn about the relationship between the force applied to an object and the resulting motion. Programming demonstrates how forces cause changes in speed or direction of objects. Aligns with Utah SEEd Standard 3.3.1, 45 minutes.



# Forces of Flight THIRD GRADE

Learn about some of the practical applications of physics as we investigate the forces of flight and determine the effect of balanced and unbalanced forces. Programming aligns with Utah SEEd Standard 3.3.1, 45 minutes. Schools may request a hands-on flight activity with the students, depending on size of class and time constraints. Hands-on activities take an additional 30 minutes per group.



# Energy Works FOURTH GRADE

Explore how we transform raw energy into usable forms to do work. Students discuss the difference between kinetic and potential energy, and learn how they become chemical, thermal, mechanical, and then electrical energy. Aligns with Utah SEEd Standard 4.2.3, 45 minutes.



# Electricity FOURTH GRADE

Observe how electrical energy is transferred from place to place with exciting demonstrations of static and current electricity! Lesson also discusses different types of electrical circuits and uses student participation to carry out experiments. Aligns with Utah SEEd Standard 4.2.3, 45-50 minutes.



## Chemistry Matters

Explore the nature of chemical reactions as we uncover the materials that make up our world, then combine substances to create something new! Programming aligns with Utah SEEd Standard 5.2.3, 45 minutes.



#### Weather SIXTH GRADE

Investigate the air masses that cause changes in weather patterns and what we monitor at Hill Air Force Base for our pilots! Programming includes information on the transfer of air from high to low pressure, cloud formations, and varying weather phenomena. Aligns with Utah SEEd Standard 6.3.2, 45 minutes.



#### Astronomy SIXTH GRADE

Discuss patterns in the nature, scale, and properties of objects in the solar system; how we have utilized these patterns historically; and how the Air Force and Space Force look at them now! Aligns with Utah SEEd Standard 6.1.3, 45-50 minutes.

### MUSEUM EDUCATION CURRICULUM

#### CORE-BASED HISTORY PROGRAMMING



### Hill Field Beginnings

Use critical thinking to examine the roots of Hill Field in Northern Utah and interpret how military bases impact community growth. Students work with primary sources to analyze community reactions to the construction and installation of Hill Air Force Base. Aligns with 11th grade Utah Core curriculum, U.S. II Standard 6.2, 60 minutes.



### Keep 'em Flyin' and Fightin': Hill Field and WWII

Use primary sources to interpret the role of Hill Field in World War II and explore how media reflects the impact of war on our local environment. Learn about the B-17, B-24, and B-29 aircraft and the significant role that maintenance played in keeping the United States Air Force Flyin' and Fightin' at a critical moment in American history. Programming aligns with 11th grade Utah Core curriculum, U.S. II Standard 6.2, 60 minutes.



#### OTHFR FXHIBITS STEAM FACILITATED THE MUSEUM ONLY)



### C-130 Experience

Find out about the history of the C-130, one of most diverse and widely used aircraft in military history. This plane has the remarkable ability to do so many jobs, it is sometimes called the Swiss Army Knife of planes. After learning about this aircraft, tour our C-130 cabin and cargo bay. 40-45 minutes



### **Helicopters in Action!**

Come learn what helicopters can do! Then cut and fold paper helicopters and fly them off the balcony! Great activity for younger kids. 30 minutes.



### **Rockets and Missiles!**

Students will learn the most important elements that make up a rocket or missile, then create their own to launch in front of the museum! This lesson takes 60-90 minutes. Maximum class capacity cannot exceed 40.

Appointments for lessons may be requested a minimum of two weeks in advance and a maximum of six months in advance, depending on availability of museum staff.

**CONTACT**: To schedule a field trip/visit for these educational programs, or if there are any questions, please contact the Museum Event Coordinator at education@aerospaceutah.org or (801) 775-3497.







