

Science Community Opportunities

September 11, 2017

STEM Action Center grant applications

Hello!

As you may know, this is a big time for STEM Action Center grant applications. Please share the following information with those in your building/district that you feel may benefit.

- ***Classroom Grant:*** a competitive grant awarding up to \$1500 for classroom supplies and materials for STEM activities. Open through **September 29, 2017**.
- ***STEM Organizations:*** This competitive grant is intended for organizations that are **not schools** offering on-going programs for STEM content. Funds should serve three purposes: broaden student impact, increase student resources, and encourage student involvement in STEM activities. This application opens **September 15, 2017, and closes October 1, 2017**.
- ***STEM School Designation:*** Intent to apply open through **Oct. 9, 2017**, this program is for schools desiring to be awarded a STEM School Designation.

Check stem.utah.gov for more information on any of these programs and to access the applications.

Thank you,

STEM Action Center

SEPTEMBER 2017

- **The Leonardo's Educator Newsletter** – September 2017
- **Field Trips and Teacher Development** – discovery gateway the children's museum of Utah – September 2017
- **Field Trips to Astro Camp** – September 2017

- **Utah Youth Environmental Summit (Utah YES) at the Alta Ski Resort!** – September 15 – 16, 2017
- **NITARP – Great Opportunity for teachers & informal STEM-related Educators** – Application Deadline – September 19, 2017 *****NEW THIS WEEK**
- **E.C.O. Challenge at Thanksgiving Point** – September 21, 2017
- **High School Opportunities with University of Utah Chemistry Department** – September 23, 2017
- **USTA Family Day – Spiral Jetty** - September 23, 2017
- **University of Utah Pioneers of Science – Luise Poulton lecture** – September 28, 2017
- **Fall ACS Chemistry Festival** – September 30, 2017
- **Project Learning Tree, Air Quality Theme, Thanksgiving Point, Lehi** – September 30, 2017
- **Archaeology opportunity for high school students and teachers this fall** – September – October, 2017

OCTOBER 2017

- **STEM Fest** – October 3 – 4, 2017
- **Utah Society for Environmental Education** – October 7, 2017
- **Teacher Trilobite Day** – October 14, 2017
- **STEAM Festival** – October 16 – 17, 2017 *****NEW THIS WEEK**

NOVEMBER 2017

- **Project Learning Tree, Air Quality Theme, Logan City Hall, Logan** – Nov 11, 2017
- **Albert Einstein Distinguished Educator Fellowship Program Application is open – Application Deadline is NOVEMBER 16, 2017**

MARCH 2018

- **Thanksgiving Point – ECO Challenge** – March 2018

SEPTEMBER 2017

Utah Youth Environmental Summit (Utah YES) at the Alta Ski Resort!

Dear STEM Educators,

We wish to invite your students to the first annual Utah Youth Environmental Summit (Utah YES) at the Alta Ski Resort! The Utah Youth Environmental Summit is a forum for environmentally conscious students to gain the skills and social networking opportunities to lead our state in environmental justice and sustainability initiatives.

- **Date & Time: Sept 15-16, 2017, 4pm Friday to 4pm Saturday**
- **Location: Alta Ski Resort- Albion Grill**
- **Cost: \$5:00/person**

(Limited to a maximum of 5 students and 1 chaperone/school)

Our summit will consist of workshops, guest speaker presentations, and outdoor excursions to gain a greater appreciation of Utah's natural wonders and a resolve to keep them from harm.

NITARP – Great Opportunity for teachers & informal STEM-related Educators – Application Deadline – September 19, 2017

The NASA/IPAC Teacher Archive Research Program (NITARP) is open to educators grades 8 through 12, community college, museum, science center, planetarium, etc. NITARP partners small groups of educators with a mentor professional astronomer for a year-long original research project using NASA's vast archives of astronomical data from space-and ground-based telescopes.

APPLICATION DEADLINE: Tuesday, September 19, 2017 @ 3:00 PM Pacific Time

LINK to APPLICATION: https://nitarp.ipac.caltech.edu/ckeditor_assets/attachments/142/2018appl_v1.pdf?1494862261

LINK to more information about NITARP: <https://nitarp.ipac.caltech.edu/>

Thanks so very much!!

Tim

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E.C.O. Challenge at Thanksgiving Point – September 21, 2017

Good afternoon, educators!

Thanksgiving Point's education department is pleased to announce E.C.O. Challenge Career Day coming up this September 21st! Our Explore, Create, Observe (E.C.O.) Challenge is a STEM program that invites high school students to address real-world environmental challenges on both a local and global scale.

What is E.C.O. Challenge? In the fall, students attend a career day to meet professionals working in science and engineering careers from state agencies, industry, and non-profit organizations. Teens learn the needs or problems in these fields, and undertake a related "challenge." Students spend the next several months designing and prototyping solutions using a variety of disciplines. From producing short films to inventions that aid in conservation, students select unique and authentic ways to contribute their ideas and solutions. Prizes are awarded to help schools provide real world environmental science programs in the coming year. We invite you to participate and join the E.C.O. Challenge!

Why Participate? E.C.O. Challenge is a wonderful opportunity for young minds because it is designed to inspire students' critical-thinking skills and civic engagement; as well as showcase the students' abilities to local industries and agencies. Furthermore, it enables educators to connect to a network of educational resources and hands-on learning opportunities. Contestants also have an opportunity to win prizes and recognition for both student and school achievement.

How do I participate? To get started, please submit a school registration form to Thanksgiving Point [here](#). You may participate in the Career Day in the fall and/or the Challenge showcase in the Spring.

What are the Prizes/Awards? The top-scoring high school (by average of points awarded) will receive the 2017-2018 E.C.O. Challenge Award. The three top-scoring schools are awarded \$1,000

(1st), \$500 (2nd), and \$250 (3rd) to support environmental programs and initiatives at their school. Participating students and teachers also receive E.C.O. Challenge T-shirts (featuring the winning design of the T-shirt Design Challenge.)

This event is a great opportunity to enrich your students' education. More information on the challenges can be found [here](#). Don't miss out! Accept your invite by emailing us back at challenge@thanksgivingpoint.org, or give us a call at [801-768-7480](tel:801-768-7480). We look forward to hearing from you this week!

Best regards,
Allyson Jennings-Johnson
Thanksgiving Point Education Intern

High School Opportunities with University of Utah Chemistry Department – September 23, 2017

The University of Utah Chemistry Department is hoping to build better connections with High School Chemistry Teachers across the state to inform both teachers and students of opportunities available to them. If you are interested please use this link to give/update your information-

https://docs.google.com/forms/d/e/1FAIpQLSeS70pYA71q7ePSH2sl7791b6EVLzf_I-Mici2u4aRjjiKnbA/viewform?usp=sf_link Thank you!

The fall teachers workshop at the University of Utah will be held from 8:00 AM to noon on September 23rd in room 4630 of the Thatcher Building for Biological and Biophysical Chemistry on the University of Utah's campus. We will start with a lecture by Dr. Michael Morse on "Modern Materials". Afterwards we will take a short break for a snack. Then Dr. Roger Kugel, past Chief Reader for the AP Chemistry test, will talk to us about results from the most recent AP Chemistry test. There will be several announcements from Dr. Atwood about programs at the the University of Utah. Then we will have lunch before everyone heads home. There is no cost to teachers. All you have to do is get to the U by 8 AM and head home near noon. We hope that you can come join us. Please RSVP using this link-

<https://goo.gl/forms/l2zJ9A0GEyamzI212> **no later than Wednesday, September 20th at 5pm.**

USTA Family Day – Spiral Jetty - September 23, 2017

Saturday, September 23rd 10am–1pm
Attendance is FREE
Google Directions are available
at: <http://tinyurl.com/spiraljetty>

The Utah Science Teachers Association has partnered with Great Salt Lake Institute for 6th Annual USTA Day at Great Salt Lake. This year's event is a wonderful opportunity to come experience the North Arm of Great Salt Lake and the Spiral Jetty (a wonderful art installation along Great Salt Lake's coast). There will be activities for teachers and their families including making Winogradsky Columns, information on local wildlife, an investigation of "Phenomena of Great Salt Lake geology", collecting gypsum crystals, Brine Shrimp population model lesson, the DrumBus, and MORE!!!

Come with water, snacks, and chairs (if you want to relax). Also plan ahead for travel times and bathroom stops (more information about the jetty can be found at <https://www.diaart.org/visit/visit/robert-smithson-spiral-jetty>).

Questions about the event? Contact:

Jaimi Butler at jbutler@westminstercollege.edu

Ricky Scott at richard.scott@schools.utah.gov

University of Utah Pioneers of Science – Luise Poulton lecture – September 28, 2017

Euclid's *Elements of Geometry* was first printed in 1482, just as soon as one of the early masters of movable type figured out how to do it. Not only does the Marriott Library have this first edition, but also first editions of books by other pioneers of science: Isaac Newton, Johannes Kepler, Galileo, Antoine Lavoisier, Carl Gauss, Charles Darwin, Michael Faraday, Louis Pasteur, Marie Curie, and more. Each of these books has its own story to tell. Together they give insight into the communication, conversation, collaboration, and controversy that made science possible: a revolution that has been going on in print for more than five hundred years.

RECEPTION AND RARE BOOK SHOWING FOLLOWING THE LECTURE!

Project Learning Tree, Air Quality Theme, Thanksgiving Point, Lehi – September 30, 2017

Project Learning Tree: Air Quality Theme (K-8)

September 30, 2017, 9:00am-3:00pm

Location: Thanksgiving Point, Kidopolis Classroom at the Museum of Natural Curiosity, Lehi

Eligible for USBE Credit

Register \$0 (value is \$35)

This workshop is available for FREE thanks to a generousUCAIR grant awarded to [Breathe Utah](#).

Contact us **about setting up a workshop at your school or organization!**

Availability may vary with time of year and location, 8 or more participants required.

Check out our upcoming workshops!

REGISTER HERE! (usee.org)

Archaeology opportunity for high school students and teachers this fall

Utah Science Educators:

We would like to invite you and your high school students to take part in a volunteer-based archaeological excavation happening in Nine Mile Canyon (outside of Price, Utah) this fall. If you're looking for a highly unique and memorable field trip experience for your students involving geology, ecology, anthropology, history, and so much more, this is it! Arizona State University has been working in partnership with the Bureau of Land Management Price Field Office, Moab-based Montgomery Archaeological Consultants, the Colorado Plateau Archaeological Alliance, and Utah State University Eastern's Prehistoric Museum to offer these rare opportunities to Utah high school students and the greater public.

Here's a quick snapshot of what's involved:

- Hands-on, experiential STEM education and community service opportunity
- Six consecutive 2 or 3-day weekends of camping and archaeology (each group only needs to sign up for 1 weekend), September through October, 2017
- Work in small groups of about 10 people alongside professional archaeologists
- Take part in the excavation and discovery of artifacts in a pit structure in archaeologically famous Nine Mile Canyon!

To learn more or sign up, you please visit our website: <http://ninemilevolunteer.weebly.com> or contact Jada Lindblom at jada.lindblom@asu.edu.

OCTOBER 2017

STEM Fest - October 3 - 4, 2017

ATTENTION: Principals, teachers, and administrators,

Have you signed your school up to attend STEM Fest?! Come and be a part of the most unique gathering ever assembled in Utah! Enjoy exciting hands-on experiences with science and technology that will spark your student's imaginations and give them a peek into their future career opportunities right here in Utah. Your kids will have so much fun, they may not even realize that they're learning! More than 100 hands-on experiences to visit!

Follow the link below to register your students to attend. You can also apply for [transportation reimbursement](#). Bus funding will be provided on a first come, first served basis...so don't wait!

October 3-4, 2017

8:30 - 3:00 p.m.

5th-10th Grades

October 3, 2017

Open to the public (all ages)

2 p.m. - 8 p.m.

stem.utah.gov

Utah Society for Environmental Education – October 7, 2017

Join the Utah Society for Environmental Education for a fun and informative day bringing specialists, community organizations and schools together! We'll have hands-on activities and plenty of networking opportunities!

For more information and to register, please visit: <http://www.usee.org/events/summit>

When: Saturday, October 7, 2017, 10:00 A.M. to 3:00 P.M.

Where: Rowland Hall Library, 843 Lincoln Street, Salt Lake City

Cost: FREE! Lunch will be provided.

Who:

- Previous, Current & Potential Utah Green Schools
- Partnering Organizations interested in sharing how they can support efforts for Utah Green Schools

- Anyone interested in learning more about Utah Green Schools

Share fair tables available for schools and organizations interested in sharing their green/sustainable efforts! We will have dedicated time for visiting staffed tables.

TENTATIVE SCHEDULE:

USEE/Utah Green Schools Overview & Updates

Thom Benedict, Executive Director, USEE

EE & Sustainability at Rowland Hall

Andrew Hagedorn, Sustainability Coordinator, Rowland Hall

Project Learning Tree Overview & GreenSchools Investigations Workshop

Kathy McGlaughlin, Senior Vice President of Education for the Sustainable Forestry Initiative and Executive Director of Project Learning Tree (PLT)

Lunch

Share Fair - Utah Schools & EE Partners

EE Correlations to Utah Science Standards

Richard Scott, Science Specialist, Utah State Board of Education

"Reduce the Juice!"

Greg Libecchi, Energy & Resource Manager, Salt Lake City

Please contact Jackie Lowry at programs@usee.org if you have any questions.

NOVEMBER 2017

Project Learning Tree, Air Quality Theme, Logan City Hall, Logan – November 11, 2017

Project Learning Tree: Air Quality Theme (K-8)

November 11, 2017, 10:00am-4:00pm

Location: Logan City Hall, Main Conference Room, Logan

Eligible for USBE Credit

Register \$0 (value is \$35)

This workshop is available for FREE thanks to a generousUCAIR grant awarded to [Breathe Utah](#).

Contact us about setting up a workshop at your school or organization!

Availability may vary with time of year and location, 8 or more participants required.

Check out our upcoming workshops!

REGISTER HERE! (usee.org)

Albert Einstein Distinguished Educator Fellowship Program Application is open – Application Deadline is NOVEMBER 16, 2017

Albert Einstein Distinguished Educator Fellowship (AEF) program is now accepting applications. **Applications are due November 16, 2017 8:00 PM Eastern Time.** More information and applications can be submitted at: <https://science.energy.gov/wdts/Einstein>

Program Overview

The Albert Einstein Distinguished Educator Fellowship (AEF) Program provides a unique opportunity for accomplished K-12 educators in the fields of science, technology, engineering, and mathematics (STEM) to serve in the national education arena. Fellows spend eleven months working in Federal agencies or in U.S. Congressional offices, applying their extensive knowledge and classroom experiences to national education program and/or education policy efforts. At the end of the Fellowship, educators are prepared to return home, equipped with access to a national network of education leaders and programs, a better understanding of the challenges and possibilities in STEM education, and a renewed passion for teaching, ready to make significant contributions to their schools and school districts.

Current sponsoring agencies include: the Department of Energy (DOE), the National Science Foundation (NSF), and the National Aeronautics and Space Administration (NASA). The DOE sponsors up to four placements in congressional offices.

The Albert Einstein Distinguished Educator Fellowship Act (Fellowship Act Public Law 103-382, Improving America's Schools Act of 1994) was signed into law in November 1994 and gives the DOE the responsibility for managing the program. The DOE Office of Science's Office of Workforce Development for Teachers and Scientists (WDTS) manages this program for DOE in collaboration with the Oak Ridge Institute for Science and Education (ORISE) and other partners.

Some outstanding contributions of past AEF Program Fellows include:

- Designing new elements of national STEM education programs;
- Implementing major components of national STEM education programs;

- Initiating collaborations and partnerships among Federal agencies;
- Drafting legislation and advising on policies that seek to improve K-12 education in the United States;
- Creating web-based science education tools; and
- Establishing and evaluating national and regional programs centered on school reform and teacher preparation in STEM.

Please go to their site for information, applications, and questions - <https://science.energy.gov/wdts/Einstein>

MARCH 2018

Thanksgiving Point – ECO Challenge

Dear Middle & High School Teachers,

On behalf of Thanksgiving Point, we formally invite you and your students to be involved in the Explore, Create, Observe (ECO) Challenge during the 2017/2018 school year!

What is the ECO Challenge?

The ECO Challenge is a multidisciplinary, environmental education program designed to give high school students, grades 7th-12th, the opportunity to learn about green careers and how they can make a difference in their communities. By appealing to their innate sense of creativity and curiosity, ECO Challenge invites students to investigate difficult environmental challenges, devise imaginative and effective responses, and take action to address them.

Beginning in the Fall of 2017, students are invited to our Green Careers Day, where they can meet professionals working in science and engineering careers from state agencies, industry, and non-profit organizations. They learn about the needs of these groups related to the challenge and spend the next several months designing and prototyping solutions to address the challenge in ways that make sense to them. From producing public service announcements to inventions in aid conservation efforts, students selected unique and authentic ways to contribute their ideas and solutions. In the spring, students present their prototype products to industry representatives and compete for prizes that help their schools provide real-world environmental science in the coming year.

Last year was a resounding success, with more than 700 students participating from 15 different schools across the state. One student comments:

“The ECO Challenge showed me that a lot of people in the world care for the environment, and that I wasn’t alone or trying to help something that was impossible to save.”

We are really looking forward to next year and are excited for what we have planned to make ECO Challenge 2017/2018 an even bigger success! Green Careers Day is planned for September 21, 2018, so be sure to mark your calendars for the beginning of this program.

If you would like to know more about the ECO Challenge or would like to sign up your school/classroom, please reach out to Lindsey McBride, Community Experiences Coordinator, [801.768.7480](tel:801.768.7480) or challenge@thanksgivingpoint.org.

We hope you will immerse your students in an authentic, hands-on environmental science program!