

STEM Resources

Here is an excellent resource for you to share with local schools or use for a branch activity within your community. It is a **FREE** website especially suited to the needs of educators and students.

Sally Ride Science

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www.stemcentral.com

What makes STEM Central special? Every resource has been vetted—reviewed and rated by educators, and ready for use in the classroom. You can search by topic, grade level, rating, or by the type of resources you need.

The following STEM Events were held around the state this past year (2013-14). You will notice that all four districts are represented!

Use these as resources for your branch to proceed **“Full Speed Ahead”** planning for the upcoming year and beyond to help **“Chart Your Future”**.

It is our hope that every branch will embrace STEM activities as an annual event and that it becomes an **AAUW signature program** in your community.



Virginia Branches STEM Events

ARLINGTON

Contact person: Susan Senn Email: sennsu@verizon.net

Contact phone: 703-244-0175

Title of the planned activity: *Mother-Daughter Discovery Tea*

Location of the planned activity: Marymount University – April 26, 2014

Target Audience: 49 – 3rd, 4th and 5th grade girls, and their mothers, of Hoffman-Boston Elementary

The Activity:

We begin at 8:00 by transporting the girls and moms from HFB via Marymount commuter buses, or Arlington Public School buses which will cost \$250 per bus. The transportation has not been completely confirmed yet. They will arrive at Marymount University which is providing a breakfast of pastries, fruit, cheese, juice and coffee. The girls, after a basic overview of the schedule will proceed to one of nine classrooms and will go through a series of five different hands-on half-hour workshops (we've scheduled 10 presenters/workshops in all). Their mothers will accompany the daughters to each workshop. They will have a 15-min. recess between workshops #3 and #4. At noon, after they've attended five workshops, they will all go to Bernie's Café, on campus for a tea lunch (sandwiches, chips, scones with cream and jam, petit fours and strawberries. We have a guest speaker planned for a 15-minute presentation. We will wrap up and give door prizes. The girls and moms then will board the buses at 1:00 pm to return to the school. We will be working with Alice Carpenter, a senior at Marymount, in charge of the STEM Club. She is marshalling her fellow colleagues to act as guides for the girls in the morning and she's getting the goody bags from the Bookstore for us.

CHARLOTTESVILLE

Contact person: Jill Jones E-mail: jilljones0@gmail.com

Contact phone: 937-681-8150

Title of the planned activity: *Third Annual Rising Stars Event*

Location: Bavaro Building, Holloway Hall, UVA's Campus

Target Audience: Middle School girls

The Activity:

The branch will host an event that honors middle school girls effort and excellence in science and mathematics. The event invites six public schools to nominate up to five girls/school to be honored. In the past we have had about 25 honorees/year and about 25-50 additional family guests (e.g., parents, siblings, grandparents). During the event, women listen to the story of an invited STEM women professional who tells an inspiring story about her career and pathway into a STEM field. Additionally, the women from the Society for Women Engineers (SWE) on UVA's campus provide guided tours and demonstrations at the nearby engineering laboratories. We will also have a sign-up sheet for mothers to join our branch or sign up for our email list.

FAIRFAX CITY – RESTON-HERNDON – MC LEAN Area

Contact persons: Suzanne Mahoney E-mail: suzanne070946@mac.com :
Contact phone: 703-978-3258

Judith Polizzotti: E-mail: judypoli@hotmail.com.
Contact phone: 203-258-9552

Title of the planned activity: *STEMtastics* (inspiring girls to pursue careers in STEM fields).

Location of the planned activity: NOVA (Northern Virginia Community College).

Date of planned activity: March 8th 2014.

Target Audience: Middle School girls

Activity:

STEMtastics is a career day event designed to inspire middle school girls (6th through 8th grade) in Fairfax County to pursue careers in STEM fields. Female presenters from across STEM fields will lead hands on workshops for students and informational workshops for parents. While covering a range of STEM fields, the focus areas will be computer science and traditional engineering fields.

The Fairfax City AAUW branch, along with the Reston Herndon AAUW Branch, will co-chair the event. AAUW members from the McLean branch are assisting with outreach. Other AAUW members from Fairfax County will assist on the day of the event.

We are also partnering with *SySTEMic Solutions* at NOVA. They are a NOVA innovative regional initiative to build strong bridges between the business community and education and increase the number of students in STEM-related degree or certificate programs. They will support the use of facilities at NOVA along with coordination with NOVA students and the middle school girls.

We hope to have over 250 students and 125 parents from across the county. There will be a charge of \$15 per student however students on a school lunch program will be exempt. We will

outreach to girls from schools with a predominance of students on the school lunch program. We are also working with Fairfax County Public Schools to reach out directly to parents of middle school girls.

FALLS CHURCH

Contact person: Kitty Richardson E-mail: kittyrichardson6@gmail.com

Contact phone: 703-573-3489

Title of the planned activity: *Rails for Girls*

Location of the planned activity: George Mason University

Date of planned activity: September 7, 2013

Target Audience: College women/Faculty

Activity:

Rails for Girls was born in Finland but is now a global, non-profit volunteer effort to give tools and a community for women to understand technology and to build their ideas. Participants learn sketching, prototyping, and basic programming and get introduced to the world of technology. A desktop computer power supply *RAIL* or *voltage rail* refers to a single voltage provided by a power supply unit (PSU). The term rail in the Rail Girls program implies power and computer savvy energy. The digital humanities are an area of research, teaching, and creation concerned with the intersection of computing and the disciplines of the humanities. Digital humanities embrace a variety of topics, from curating online collections to data mining large cultural data sets. Workshops were conducted on the campus and over 30 attendees and 10 coaches.

NORTON-WISE

Contact person: Teresa Adkins E-mail: tah7a@uvawise.edu

Contact phone: 276.328.6039 (h) 276.328.0176 (w)

Title of the planned activity: *Girls in the Middle*

Location of the planned activity: Wise and/or Pound Middle Schools-Eighth Grade

Date of planned activity: April 2014 (exact date to be decided).

Target Audience: Middle School Girls

Activity:

The *Girls in the Middle* Program is an activity that targets eighth grade girls. AAUW Norton-Wise Branch sponsors the program during the Physical Education class time, and we have topics

on self-esteem, healthy eating habits, basic skin care, and/or peer pressure/bullying. Pre-college planning, encouraging the STEM majors/careers as the major emphasis, including activities and guest speakers. The AAUW members serve as hostesses and also as speakers.

ROANOKE VALLEY

Contact person: Peggy Shifflett E-mail: pshiffle@radford.edu

Contact phone: 540-387-9154

Title of the planned activity: *STEM Conference for 6th, 7th, 8th Grade Girls*

Location of the planned activity: American National College, Roanoke, VA

Date of planned activity: March 8, 2014

Target Audience: Middle School Girls

Activity:

We have arranged a day of six interactive workshops led by women scientists, engineers, mathematicians, and technology experts. Vicky Piper, Judy Goodwin, Cathy Wright, Thayer Walker, and Lydia Celin, and Peggy Shifflett have developed this all day program. Our audience is 6th, 7th, and 8th grade girls who will be interacting with women who have succeeded in STEM (science, technology, engineering, and math.)

SUFFOLK

Contact person: Amy Wilkerson E-mail: alwilk@wm.edu

Contact phone: 757-657-9927

Title of the planned activity: *Building a Mini-Spectrometer Workshop*__.

Location of the planned activity: Boys & Girls Club of Suffolk, VA

Date of planned activity: May 2014

Target Audience: Middle School Girls

Activity:

The *Build a Mini-Spectrometer Workshop* will introduce 10 girls at the Boys and Girls Club to Visible Light Spectroscopy and provide a hands-on experience by building their own mini-spectrometer, learning to use the spectrometer they build, and allow them take it home to use with free on-line software. The activity would include a prepared power point presentation to the children and an interactive hands-on build a mini-spectrometer portion. Amy Wilkerson will be presenting the workshop. Two member volunteers will be recruited to help the students build the spectrometers.

VIRGINIA BEACH

Contact person: Sally Daniel E-mail: sdaniel@tcc.edu

Received an \$8,000 *Tech Savvy* Grant from national AAUW. Workshops were conducted on March 15, 2014 for the local Girl Scout branches. Presenters were secured from the local universities and workshops were conducted for a full day for girls and their mothers/fathers. Workshops were focused on STEM activities with women professionals presenting. Lunch was provided.

WOODBIDGE

Contact name: Susan Bardenhagen Contact email: susanmbec@juno.com
Contact phone: 703-338-9589

Title of the planned activity: *Girls + Math + Science = SUCCESS! Conference*

Location of the planned activity: Marsteller Middle School, Bristow, VA 20136

Date of planned activity: March 22, 2014

Target Audience: Middle & High School Girls

Activity:

This is our *24th annual STEM + the Arts =STEAM* career conference for students in grades 5-12 and the adults (parents and educators) in their lives. There are workshops for the adults on gender equity, women's history, and supporting their children's aspirations. Full day event.

AAUW branch members assist by securing presenters and sponsors, being presenters, setting up the conference materials, and assisting with registration on the day of the conference. They also staff a table encouraging membership in AAUW.