STEM@SVSU

SCIENCE•TECHNOLOGY•ENGINEERING•MATHEMATICS

Quarterly Newsletter Spring 2016

Greetings!

As your return from Spring Break, there are many wonderful learning opportunities for teachers and students to look forward to in the coming months.

The arrival of our Mobile STEM Lab is big news not just on campus but all over the Great Lakes Bay Region-be sure to check out the article and find out how to bring the lab to your school district.

Almost 125 teachers joined us in February for the second annual STEM Teacher Dinner-triple the number we hosted a year ago. STEM is of interest to so many educators and we are here to support your work in any way we can.

Enjoy discovering the many opportunities ahead and contact us if you need something we haven't listed!



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IN THIS ISSUE . . .

- Outline of Summer Opportunities
- Focus on the STEM Mobile Lab
- Highlight of SVSU Faculty Member Dr. Rajani Muraleedharan and her excitement about Girls and STEM

Summer 2016 Brings STEM Learning to All Teachers

The Dow Science and Sustainability Education Center will select 10 middle school and/or high school teachers to work in watershed research this summer from June 27-August 12. The deadline for application is April 1 or until filled with the application found at www.svsu.edu/stem

The Dow Corning Foundation/SVSU STEM Community Partnership is a two week summer research institute and teachers are partnered with a Dow Corning Professional and SVSU Faculty member to develop a STEM –based project to enhance student interest and knowledge.

Applications were due March 15 but are accepted on a rolling basis for the program which will be on campus June 23-24, June 27-29 and July 25-29. Applications are found at www.svsu.edu/stem.

High School Students

The Dow Science and Sustainability Education Center will select 20 High School Students (rising 10th, 11th, and 12th graders) to participate in the watershed research project from June 27-August 12. All students are paid for their work. Applications are due April 8. www.svsu.edu/stem

The Thematic High School Summer STEM Camps are offered to current 9th through 12th grade students and applications are available at www.svsu.edu/stem with a deadline of May 20.

The camps are at no cost and open to talented and interested students in STEM.

The dates of the two week programs are June 20-24, June 27-30; July 18-22, July 25-28; and August 1-5, August 8-11





The Consumers Energy Talent

Development Program is available to interested incoming high school seniors to take the Intro to Engineering class. The application is available at www.svsu.edu/stem and the application deadline is May 2.

Highlighting SVSU STEM Faculty Member: Dr. Rajani Muraleedhuran



Please describe several of the current STEM Projects you are involved with as a STEM Faculty member at SVSU.

- Girls STEM camp with New Lothrop Public Schools
- a half day camp with high school students that introduces fundamental

concepts of Robotics and Programming.

- Girls STEM/GAME camp with ISD Bay Arenac

 a full day camp for middle school students
 in Great Bay Region. The camp introduces
 fundamentals of electrical engineering, and
 computer programming. The camp includes a
 tour of research labs and invited talk by local
 industrial leader.
- SVSU Robotics and Beyond Camp A 9 full day High School STEM Camp focuses on understanding modern robotics using hands-on experience through projects involving Arduino and Lego Mindstorm kit

What connections would you like to enhance with local K-12 STEM educators?

I would like to develop a STEM curriculum that focuses on fundamentals of Electrical and Computer Engineering with local schools to understand the evolution of sensor technology and engineering applications used in our day-to-day lives.

What should local educators share with their students about STEM opportunities at SVSU?

The Society of Women Engineers (SWE) organization, which aims to enhance education and scholarship opportunities for girls in engineering.

Do you have any other thoughts you would like to share?

April 22 is a university-wide research showcase day—a great opportunity to bring students to see STEM in action! Contact STEM@SVSU.edu for more information.





STEM Mobile Research Laboratory is on the Road!

Thanks to the incredible generosity and partnership with The Dow Chemical Company, a modern scientific research lab is on the road to promote hands-on experiments and environmental studies throughout the Great Lakes Bay Region

School and community visits are underway this spring. If you are interested in bringing the mobile lab to your school contact STEM@svsu.edu

The lab is a great asset to STEM nights and is best when part of a larger event. Participants who visit the lab will have a tour and demonstration around water quality experiments. The lab is currently being scheduled for spring and summer visits - email today to find schedule a time. There is no cost.

Currently teachers who have previously participated in the summer program of the Dow Science and Sustainability Education Center are working with faculty to prepare units to be taught at middle and high school on the lab beginning in the Fall. Announcements about these particular units will be part of the 'back to school' edition of this newsletter.









Dow STEM Ambassadors Impacting Region

The Dow Chemical Company continues to support STEM education providing Dow Amabassadors to visit classrooms and to offer support to STEM activities.

Dow STEM Ambassadors participate in After School Activities including FIRST Programs, You Be The Chemist, Project Lead the Way, Science Fairs and Career Nights and numerous other community STEM activities. Additionally, STEM Ambassadors provide Teacher Support through professional development, grants and the teacher partner program. Ambassadors also visit classrooms during school days with career discussions, guest lectures, modules, experiments and project based learning.

Adrianne Cole serves as the STEM Program Manager. Contact her at acole@svsu.edu to learn more or to schedule a visit.

2015 statistics of this program are amazing...186 Ambassadors, 105 events, 2,173 volunteer hours, 268 teachers impacting 17,596 students!

2015 Statistics ...

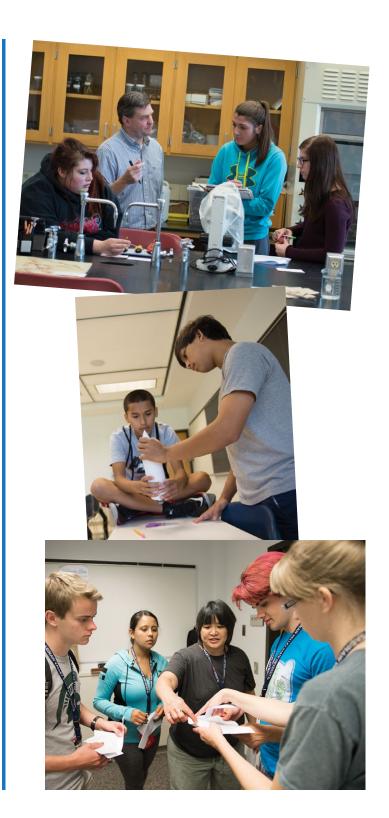
186 ₁₀₅ 2,173

286

Teachers impacting 17,596

Looking to Fall...

- Hour of Code for Elementary Classrooms will be offered again look for application information
- Scheduling of Mobile Lab for Classroom Teaching Visits information in back to school edition





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