ARE YOU READY FOR A STEM-TASTIC SATURDAY?

A SERIES OF HANDS-ON STEM WORKSHOPS FOR ELEMENTARY TEACHERS

Presented by the UC Davis School of Education

Our amazing team of instructors will help you increase your knowledge and comfort level. Experience a variety of STEM resources tailored for immediate classroom implementation.

5 Self-contained Workshops
Nov. 7 – Dec. 12, 2015
9:00 a.m. – 1:00 p.m.
UC Davis Academic Surge Building
$50 per workshop

THE WORKSHOP LINE-UP

- **November 7:** Get Going with Lego Mindstorms – Eric Garber
- **November 14:** Math 4 Life – Jonathan Schwartz
- **November 21:** Computer Programming and More with Scratch – Roland Aichele
- **December 5:** Inspiring Design and 3D Printing – James Shimek
- **December 12:** Going Google in the Classroom – Roland Aichele

Enrollment is limited. We encourage you to register early! Free parking on Saturdays.

Continuing education units offered through UC Davis Extension:
- 2 workshops, .8 units, $100
- 3 workshops, 1 unit, $100
- 5 workshops, 2 units, $115

For detailed workshop descriptions and to register, visit our website:
https://www.regonline.com/builder/site/?eventid=1767282

For questions, contact Andee Press-Dawson at apressdawson@ucdavis.edu or call (530) 574-8906

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STEM Workshops

9:00 a.m. – 1:00 p.m.

- **November 7:** Get Going with Lego Mindstorms – Eric Garber
  This course focuses on creating engaging robotics activities for elementary and middle school students that are grounded in the 8 Practices of science and engineering in the Next Generation Science Standards. We will look at classroom structures and specific activities to help students navigate the programming of NXT-G software and constructing robots with a variety of sensors and functions. We will utilize experiential learning by working in groups to build and program our own robots to meet design challenges and compete with other groups. There will also be a time to bring in your own resources to share and make connections with other teachers who are using robotics in their classrooms. The course will be led by Eric Garber who has been using robotics in the classroom, coaching First Lego League teams and creating a variety of robotics summer enrichment camps for the past seven years.

- **November 14:** Math 4 Life – Jonathan Schwartz
  This hands on session will demonstrate ways to bring math alive in your classroom. We will start out with Core-Cards, fractional playing cards and learn games that will pull any student into the mix. Next we design and build a Ruler. The Ruler Project begins with a review of mathematical concepts related to measurement and shows educators how easily they can incorporate STEM teachings into the learning environment. Third project we will work on is building a puzzle where students can balance 14 nails on the head of a single nail. There will also be time for instructors to bring in their own resources and to share with the class. Jonathan Schwartz graduated from the University California, Davis and worked in industry for years before returning to Harvard University for a Masters in Math Education. He is passionate about teaching the applications of math.

- **November 21:** Computer Programming and More with Scratch – Roland Aichele
  This course is all about using Scratch, a free programming environment, in the classroom to teach the seven main computer programming concepts found in all programming languages. Furthermore, we will dive deeper to discover how Scratch can be used in various content areas by students as a creative means to express their learning. Together we will build animations, games, and more. The course will be led by Roland Aichele, who has been using Scratch in the classroom since 2009. He will share a multitude of resources as well as all the ways he has used Scratch to cultivate creative and critically thinking programmers through this medium.

- **December 5:** Inspiring Design and 3D Printing – James Shimek
  This course will focus on two useful tools for educators facing the new standards, The Design Thinking Process and 3d printers. By leveraging these tools, it’s possible to transform any curriculum into remarkable design projects that students will treasure. The course will be led by James Shimek who is a full time engineering and technology teacher that has been experimenting with 3d printers in a classroom setting for the last 3 years. Using his own background in engineering, he hopes to help teachers create engaging and fun design projects that will inspire the future generation of thinkers.

- **December 12:** Going Google in the Classroom – Roland Aichele
  More and more districts have been implementing Google Apps for Education. This course focuses on how to leverage the tools provided within the Google Apps suite to make for a more efficient educator. We will be diving deep into Gmail, Drive, Docs, Sheets, sites and more to learn ways to lighten the workload and enhance the learning experience. Streamlining assessment, collaborative writing, portfolio creation, and home-school communication are just some of the areas that will be touched on. The course will be led by Roland Aichele, who has been the domain administrator for Google Apps for Education for his school for the last five years. Having a Google Apps for Education account is preferable for this course, but not mandatory. Participants will need a personal Google account.