

C-STEM 1-Day Academy on Integrated Computing and STEM Education

"Simply the best staff development training I have ever been to. In my experience practicing classroom teachers always give the best advice, and the UC Davis C-STEM program offers this."

Doug Obrigawitch

Math Teacher and Department Chair Manteca High School

Saturday February 25, 2017 8:30am-4:30pm

Santa Rosa Jr. College
Doyle Library Room 4246
1501 Mendocino Ave
Santa Rosa Ca 95401

Registration:

Costs: \$200

Due: one week before Academy

Registration covers instruction and a software license for teaching. No refund after instruction begins.

http://c-stem.ucdavis.edu/training

The C-STEM 1-Day Introductory Academy introduces teachers in grades 5-12, and community college STEM teachers, as well as math/CTE/Science coordinators, to the full C-STEM Studio software suit, sample curriculum, Common Core State Standard alignment, C-STEM Teaching Resources, and RoboPlay Competition Challenges.

RoboBlockly - Blockly designed for beginners to learn coding and math with robots.

Ch Command Shell – allows users to learn arithmetic and order of operations conveniently.

Ch - a C/C++ interpreter. Ch and ChIDE designed for beginners to learn computer programming in C/C++ for mathematics and robotics.

Linkbot – an educational modular robot to learn math and science

Linkbot Labs – allows the user to connect a computer to Linkbots and program them in Ch.

RoboSim – a robot simulation environment for programming virtual Linkbot, NXT, and EV3 using the same C/C++ code without any modification.

Ch Linkbot Controller – provides scaffolding to control and program in Ch for hardware and virtual Linkbots

RoboPlay Competition - a theme-based level playing field robotics competition for K-14 students

In the morning, attendees will diveright in and begin learning:

- the fundamentals of programming robots with RoboBlockly
- major features of a Linkbot
- programming robots in ChIDE

For more information, please contact Zane Miller, C-STEM Education Specialist and Technology Coordinator at: zmiller@ucdavis.edu (530) 304-3640 or http://c-stem.ucdavis.edu

In the afternoon, attendees will explore the fundamentals of C/C++ programing for computational mathematics in our Ch interpreter ChIDE. Topics include:

- variable types and declaration
- programming output
- precision of decimal numbers
- user input from programs to control robots
- plotting points and lines
- displaying and organizing data displays
- Common Core alignment
- introduction to C-STEM teaching resources



