The UC Davis K-14 Outreach Center for Computing and STEM Education (C-STEM) presents
the 2011 UC Davis Summer Institute on Computing and STEM Education
http://c-stem.ucdavis.edu/training/summer_institute/
with two short courses for K-12 STEM teachers

Teaching Math Labs for Algebra
Using Interactive Computing and Programming
1062 Bainer Hall, UC Davis campus
8:30am-5pm, June 20 - June 24, 2011

- Labs have been designed for K6 to K12 math teachers for Algebraic Reasoning, Algebra Readiness,
  Pre-Algebra, or Algebra I with simple, concise, and self-contained math lab sessions
- Participants in the short course will learn how to integrate labs into their classrooms so students understand
  abstract concepts of algebra and their practical applications, and the fundamentals of computing and computer
  programming for problem solving
- The C-STEM Center works with teachers to implement in the curriculum during the academic year

Teaching Introductory Computer Programming
and Computer Science
1062 Bainer Hall, UC Davis campus
8:30am-5pm, June 27 - July 1, 2011

- Designed for K-12 teachers for Technology, Computer Programming, Robotics on how to teach computer programming and computer science
  for applications in science, technology, engineering, and mathematics
- Learn structured programming in C for computer-aided problem solving
- The C-STEM Center works with teachers to implement in academic year

Registration
- $499 for one course / $799 for both courses registered before June 10, 2011; $599 / $899 after June 10, 2011.
- Registration covers instruction, supplementary textbooks, teaching materials, software licenses for teaching, morning beverages, lunch, and UC Davis C-STEM Center support for implementation of the program during
  the academic year
- No refund after instruction begins
- Optional $145 for 4 Continuing Education Unit quarter credits from UC Davis Extension, available for each
  course. Credit request forms available first day of class
- Make check payable to “The Regents of the University of California”. Send check and this application form to
  Kevin Gucwa, Director Assistant, UC Davis C-STEM Center, UC Davis, One Shields Avenue, Davis, CA
  95616; phone (530) 752-1028; Email: kgucwa@ucdavis.edu

Name ________________________________________ District ____________________________________
Address ____________________________________________ County ____________________________
City ____________________________ Zip __________
Home Phone ________________________________________
School ____________________________________________
School Address ________________________________________
____________________________________________________
School Email _________________________________________
School Phone ________________________________________

District __________________________________________
County __________________________________________
Grade Level(s) taught ______________________________

Courses to be taken:
Algorithm __ $499 ($599 for late) ______
CS __ $499 ($599 for late) ______
Both __ $799 ($899 for late) ______

Total cost: ____________________________
UC Davis K-14 Outreach Center for Computing and STEM Education (C-STEM)

http://c-stem.ucdavis.edu

The mission of the UC Davis K-14 Outreach Center for Computing and STEM Education is to improve computing, science, technology, engineering, and mathematics (C-STEM) education in both formal and informal programs in K-14. We add ‘C’ in front of STEM and integrate ‘C’ into STEM. The goal of the C-STEM Center is to broaden participation of students, especially female and underrepresented minorities, in computing and to develop students’ computer-aided problem-solving skills to tackle real-world STEM problems. The C-STEM Center also studies how to streamline the curriculum on computing education in the context of STEM subjects in elementary schools, middle schools, high schools, and first two years in colleges to increase student interest in pursuing computing and STEM related careers, and post-secondary study.

What We Do

Researching and Developing Teaching Resources for Computing and STEM Education

- Conduct Research on K-12 Computing and STEM Education
- Develop pedagogy and strategies to integrate computing into STEM education
- Develop courseware and teaching materials for K-12 computing and STEM education

Training and Professional Development for K-12 STEM Teachers

- Offer workshops, tutorials, and summer institute for professional development for STEM teachers on computing and programming in C/C++, pedagogy on teaching computing in K-12, and its integration in STEM curriculum.
- Provide teachers with teaching materials including course syllabus, homework assignments, and solutions.

Teaching in K-12 Schools

- A supporting group of UC Davis faculty, graduate and undergraduate students, and K-12 teachers for implementation. UC Davis students learn technology and leadership through K-12 outreach activities.
- UC Davis graduate and undergraduate students travel to K-12 schools to give lectures and serve as role models to inspire K-12 students to learn computing and STEM subjects.
- Show K-12 students what can be accomplished with an education in computing and STEM related fields.

UC Davis C-STEM Day for Advocating C-STEM Education

- UC Davis Secondary School Programming Competition
- UC Davis Robot Challenge Competition
- Symposium on C-STEM Education in the 21st Century
- C-STEM Workshops for K-12 students
- C-STEM Awards for K-12 teachers and students
- C-STEM Scholarship for college bound seniors
- NCWIT Award for Aspirations in Computing

Contact: For more information, please contact the C-STEM Director
Dr. Harry H. Cheng at hhcheng@ucdavis.edu or (530) 752-5020