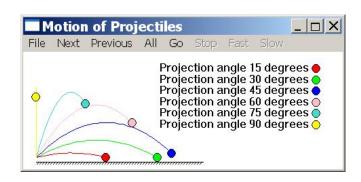


# Call for Participation 2013 Secondary School Math Programming Competition

Early registration deadline: March 8, 2013 Final registration deadline: March 22, 2013 C-STEM Day: May 4, 2013

http://c-stem.ucdavis.edu





## **Objectives**

The UC Davis Secondary School Math Programming Competition provides students in secondary schools with the opportunity to apply their fundamental computer programming skills for applications in mathematics. Mathematics is necessary for all secondary school students since it is the gatekeeper for STEM careers. This competition challenges students to apply their programming skills to solve math problems. Students will use structured programming in C, including basic programming concepts such as variables, math expressions and operators, selection statements, and loops for computer-aided math problem solving.

# **Competition Categories**

There are two categories for the competition:

- Category I: Up to Algebra I (including Pre-Algebra and Algebra I in the Common Core Math Standard)
  - o Requirements:
    - Team members are currently enrolled in Algebra I or Pre-Algebra at the time of the competition.
    - They should have not completed Algebra I at the time of the competition.
    - Team members can be from Elementary, Middle or High Schools.
- Category II: Up to Algebra II (including Algebra I, Geometry, Trigonometry, and Algebra II)
  - o Requirements:
    - No restriction on academic standing.
    - Team members can be from Elementary, Middle, or High School.

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### **Competition Rules**

- Team members can be from Elementary, Middle or High Schools.
- One computer installed with the C/C++ interpreter Ch (including references for standard C functions) will be provided for each team. Use of other electronics during the competition, including other computers, calculators, cell phones, and other computing devices is not allowed.
- Each student may bring a set of notes and any C programming and math books of their choice. There will be no internet access during the competition. If a team is caught using the internet during the competition, the team will be disqualified.
- Once the competition has begun, the teams may speak to the Judges for clarification on problems, but should not talk to anyone else outside of their team.
- The Competition will last three hours. Fifteen minutes will be given to orient themselves with the computer they will be using. The remaining time will be used to solve the math programming problems.
- Problems can be completed in any order. Points will only be awarded for fully completed problems.
   The program file should be named as follows:

TeamName\_problem\_#.c (e.g. RiverCityHighSchool\_Team1\_problem\_2.c)

### **Team Registration**

- Each team can have 2 to 3 students
- Each teacher can sponsor up to two teams in any category
- Teams must register before the deadline to assure that there are enough computers, lunch tickets, and other relevant materials available for all teams the day of the competition
- Teams that register before the early registration deadline must pay a registration fee of \$60 per team
- Teams that register before the final registration deadline must pay a registration fee of \$80 per team
- T-Shirts and Lunch Tickets for Tercero Dining Commons may be purchased separately for \$15 a piece

### Organizer

UC Davis K-14 Outreach Center for Computing and STEM Education (C-STEM)

# Co-organizer

UC Davis Computing and Robotics Outreach Club UC Davis Integration Engineering Laboratory

#### Contact

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