

STEM Education:

CST is deeply committed to promoting community STEM education. We value the importance of quality STEM education for future workforce preparation and regional economic growth. We believe community efforts supporting informal STEM education are critical for the state of Alabama and Tuscaloosa local community, which traditionally have underperformed math and science K-12 education that ranked consistently at or near the national bottom in decades. Informal STEM learning through afterschool programs, family engaged STEM activities, and STEM showcases/festivals help improve community awareness, broaden participation, connect in school and out of school programs, and link STEM education with workforce needs.


In the last couple of years, CST voluntarily initiated and collaborated on various STEM education projects with local schools and community partners. Our initiatives helped to establish math competition chapters and math afterschool programs in Tuscaloosa. New initiatives in planning include a city-wide STEM Festival and family-engaged STEM activities.

- **July 2016: STEM summer day camp (lead: Dr. Yuping Bao, Dr. Xiaoli Yang, & Dr. Xiaoyan Hong)**

This STEM summer camp was design to provide students intensive morning math training using Math Counts as training materials and informal STEM learning in the afternoon through science and engineering design project, such as leaning computer coding with play cards, effectiveness of various gums in killing bacteria in mouth, DIY hotdog cooking machine, understand the friction through balloon dragging boxes.



- **July 2018: MATHCOUNTS Summer Sunday Camp (Lead: Dr. Yuping Bao & Dr. Xiaoli Yang)**



MathCounts Summer Sunday Camp

Time: 1:30 – 3:30 p.m., on five Sundays, 2018 July 1, 8, 15, 22, 29
Location: The Capitol School, 2828 6th Street, Tuscaloosa, AL 35401
Fee: \$100, for tuition and material fee **Grade level:** Middle school and up
Registration contact: xyang07@yahoo.com

Instructor (Dr. Xiaoli Yang):

- Ph.D. in Mathematics
- over 10 year experience in teaching college math
- great track record of mentoring middle school students.

Course description: exploring how to solve MATHCOUNTS problems helps to build confidence toward math problem solving. In this July Sunday math camp we will discuss a number of problems from MATHCOUNTS and review the material correspondingly. In addition, we will work on a math poster project. Let's have fun!

Organized by Chinese Sisterhood of Tuscaloosa

- **Oct. – Feb. 2019: Support & Cosponsor 2019 MATHCOUNTS Math Competition Tuscaloosa Chapter reestablishment after a 2-year gap. (Lead: Dr. Yuping Bao & Dr. Qiaoli Liang)**
<https://mathcounts.ua.edu/mathcounts-2019.html>
- **April 2019: Support and Cosponsor the first Perennial Math Tuscaloosa Tournament; Organize CST Chinese School Perennial Math team (lead: Dr. Ying Qin)**
<https://bit.ly/2GgfWZZ>
- **Jun.- Aug. 2019: Initiate & assist planning for Tuscaloosa City Schools Math Competition Administrator Skype Conference which promoted the establishment of Tuscaloosa City Schools middle school math after school program (lead: Dr. Qiaoli Liang & Dr. Yuping Bao)**
- **Aug 2019: Initiate and assist planning for the 2019 Fall math after school program at the Capitol School (lead: Dr. David Shankman & Dr. Qiaoli Liang), with two CST members serving as the after school math teachers (Dr. Amanda Cheong and Mrs. Rachel Pan).**