

**ROBOTICS I CTE
COURSE DESCRIPTION
2018 - 2019**

Course Title:	Robotics (C-Stem)
Grade Level:	4-12
Prerequisites:	None
Length of Course:	One Year
Meets/Instructor:	Tuesdays & Thursday, 2:00 pm - 3:30 pm Canyon Oak Jalynne Redman - jredman@ccoe.k12.ca.us
Requirements:	Chromebook Signed Tech Waiver Internet access

Course Description:

This is a basic robotics course that will use project based learning to introduce students to the programming and operation of single or multiple robots via either block or text based coding (Python, C/C++). The workshop will introduce STEM principles, inclusive of the practical application of mathematical concepts and will stress the Four C's of Learning:

- **Creativity**
- **Communication**
- **Collaboration**
- **Critical Thinking**

This year's course will utilize Linkbots which use a one click set-up/web browser interface and is based on the U.C. Davis C-STEM program. The linkbots come pre-built, but may be utilized/assembled in a wide variety of manners to create more complex robots. Students will have access to the Mt. Oaks Dell laptops on an as needed basis in the workshop. Additionally, they will be expected to work individually and in teams to address "challenges" for the design and operation of robotic activities. Students may choose to use a block programming app or more complex text based coding as they complete the various challenges. The workshop will culminate in a Fall and Spring School-Wide Challenge and Showcase. Additionally, students will be expected to journal their progress and activities through the use of a blogging platform and video.

The workshop meets twice a week - Tuesdays and Thursday afternoons and attendance at both weekly sessions is expected.