

2018-2019 GATE Course Descriptions



<p>GRADE 4 Instructor: Diane Maestas Facilitator: Nancy Wang</p> <p>April 13, 20, and 27 8:30-11:30 AM Field Trip: April (TBD) 2019 Homestead Museum, Ramona Museum, and JMS Media Center</p>	<p>“A Journey Through Time” Fourth graders will explore the history of the Los Angeles region from 1830 to 1930 to understand the past and how people shape history. Observation and critical thinking skills will be enhanced by connecting the past to the present during their interactive journey into the history of the Los Angeles region's growth and development.</p> <p>Students will visit San Gabriel’s Ramona Museum to select an artifact to research. Digital presentations on the culminating artifact research will be shared with classmates and families via Google Classroom.</p> <p>The course will take place at JMS, the Ramona Museum, and Homestead Museum.</p>
<p>GRADE 5 Instructor: SG Valley Engineering for Kids Facilitator: Mercy Solis</p> <p>March 2, 9, 16 8:30-11:30 AM Field Trip: Date TBD LA Dept. of Water & Power and Downtown LA sites</p>	<p>Mechanical Engineering: Energy & Motion Project #1: Catapults. Students will learn Newton’s second law of motion and how force affects the motion of a projectile. Project #2: Custom Dragsters. Students will understand the concepts of friction and drag while designing and building a car without a conventional motor. Project #3: Marble Run. Students will create a track and utilize friction to control rate of travel using angles to adjust the trajectory of a marble.</p>
<p>GRADE 6 Instructor: JC Gafford Facilitator: Kim Booth</p> <p>December 1, 8, 15 8:30-11:30 AM Field Trip: TBD</p>	<p>Podcast It! Students will choose a scientific or social science/political topic, determine a podcast objective, research their topic, create a script and record their own podcasts using computer technology. Along the way, students will be coached on script writing and presentation skills. The course will include a field trip to a professional broadcast facility or radio station.</p>
<p>GRADE 7 Instructor: SG Valley Engineering for Kids Facilitator: Diane Tom</p> <p>January 26, Feb. 2, 23 8:30-11:30 AM Field Trip: Friday, February 22nd City of Hope, Duarte</p>	<p>Engineering & Medicine- <i>New Course Offering!</i> Project #1: Blood Typing. Students will be introduced to blood types through hands-on activities. Project #2: Sheep Heart Dissection. Students learn about the form and function of the human heart through the dissection of sheep hearts. They learn about the different parts of the heart and are able to identify the anatomical structures and compare them to the all of the structural components of the human heart Project #3: Hydraulic Arm Challenge. Students will examine at how hydraulic systems work to help people perform tasks that involve large amounts of weight with seemingly little effort. Students will construct mechanical surgical tools that enable surgeons to access hard-to-reach areas of the body through small incisions.</p>
<p>GRADE 8 Instructor: Diane Tom Facilitator: Iraise Garcia</p> <p>October 13, 20, 27 8:30-11:30 AM Field Trip: Tuesday, October 23rd Cabrillo Marine Aquarium</p>	<p>Marine Biology: <i>Revised Course offering!</i> The Marine Biology program will introduce students to different types of marine life through guided internet research and hands-on activities. Students will develop an understanding of food webs, adaptation, life cycles, and animal relationships with an emphasis placed on conservation. The course culminates with a field trip to Cabrillo Marine Aquarium in San Pedro where students will participate in the Sea Search: Salt Marsh and Plankton program.</p>