

STEM Explorations I

This experiential course immerses students in the investigation of real-world engineering and technology problems and decisions affecting their local, state, national and global communities. The course encourages students to use the habits of mind employed by actual scientists, engineers, technology specialists and mathematicians. Students work in teams to identify a problem relevant to life in Alexandria and consistent with identified course themes. Each problem-solution, investigation and decision-making scenario makes use of a design cycle protocol and is conducted using a combination of laboratory and field experiences. Students' physical work space allows them to access support to gain hands-on experiences with a range of technologies and innovative processes related to designing and building projects. Partners with local STEM businesses and organizations bring industry experts into the classroom for collaboration in problem solving.

Elective Credits: 1

School Level: High School

Grade: 9

Co-Requisites:

STEM Academy participation

Program: Academy-Specific Courses