**6th Grade Engineering Design, & Problem Solving**

# Mrs. Bush

Enterprise Middle School

## Course Description

This class will immerse students in hands-on inquiry and open-ended exploration within the topics of Science, Technology, Engineering, and Mathematics. Students will develop skills, investigate real-world scientific problems, and design solutions, as they work collaboratively with others. Students will use a variety of methods to effectively communicate their understanding of scientific ideas,

## Course Objectives

* Focus on real-world issues and problems.
* Students & lessons will guided by the [engineering design process](http://www.nasa.gov/audience/foreducators/plantgrowth/reference/Eng_Design_5-12.html#.U58POF4UGvM).
* Students will be immersed in hands-on inquiry and open-ended exploration.
* Lessons will engage students in productive teamwork.
* Lessons will apply rigorous math and science content your students are learning.
* Lessons allow for multiple right answers and reframe failure as a necessary part of learning. ‘

## Course Outline/Units

* Engineering & Design
* Z Space
* Criminal Investigation Unit
* Circuits & Electricity
* Alternative Energy
* Team Building Activities throughout the quarter

## Course Materials

Text: No text book will be checked out for this class. Students should bring a three-ring binder, lined paper, pencils, Chromebook, and EMS planner each day.

## Grading/Assessment Standards

All assignments and projects will be assigned points. A student’s grade will be determined by the amount of points earned compared to the total possible points. All late work will be marked down by 10% for each day it is late, up to 50%). Students will have a minimal amount of homework for this class. It is the student’s responsibility to ask for any work that was assigned during an absence.

## Behavioral Expectations/Consequences

Students will be expected to follow all classroom and school rules as outlined in the EMS student handbook. If they fail to do so, discipline will follow as outlined in the EMS student handbook.

I look forward to working with you and your child this school year! If you have any questions or concerns feel free to call or e-mail. Thank you for your time.

Sincerely,

Janene Bush

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