

	Dual Enrollment STEM 1: Foundations	Teacher: Paul Hudson
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STEM: an educational concept that joins multiple disciplines into a single idea.

Course Description: Students will primarily use project-based-learning and research/reporting to demonstrate foundational learning of the four disciplines of STEM (Science, Technology, Engineering, and Math). Throughout the course, students will research various STEM-related careers and will provide a written and oral report for each. Students will make models, develop prototypes, and will learn to communicate results as if in a business-like setting. For each project, students will provide an oral report and/or a set of designs that align to the specified project.

Topics to be covered in STEM: Foundations

- **SAFETY** in the work setting
- Proper use of basic tools
- STEM-related careers will be researched then reported
- Computer Programming using Finch robots
- Engineering principals with a foundation of the (EDP) Engineering Design Process (building roller coasters and building)
- 3D object rendering using TinkerCAD.com
- 3D printing design and principles with the use of a Makerbot 3D printer

Projects will be graded with the use of project-specific rubrics