Excel HIGH SCHOOL

Mechanical Engineering - Course Syllabus (.5 Credit)

Description:
This introductory Mechanical Engineering course offers the student an opportunity to learn the basic components of the field of mechanical engineering. Topics covered include: Forces and Vectors, Mathematics used in Engineering, Mechanical Elements, Loads, Volumes, and Masses, Inertia and Axes, Beams, and Cables. This course also includes career exploration in the Mechanical Engineering field.

Textbook: Mechanical Engineering - © Excel Education Systems, Inc. - 2020

Course objectives:
Throughout the course, you will meet the following goals:

- Describe the difference between Science and Engineering.
- Explain the difference between two- and three-dimensional forces.
- Describe the crucial role mathematics plays in mechanical engineering.
- List and explain the basic mechanical elements engineers use.
- Describe the Pappus-Guldinus Theorems.
- Explain the important differences between the various types of loads.
- Identify potential careers in the field of Mechanical Engineering.

Contents:

Grading Scale	Grade Weighting	
A = 90-100%	**Quizzes……**	**70%**
B = 80-89%	**Final Exam…….**	**30%**
C = 70-79%		**100%**
D = 60-69%		
F = under 59%		