

## **Course Syllabus**

### **Architectural, Civil and Structural Engineering**

**Mr. Kocon**

#### **Architectural, Civil and Structural Engineering:**

Grades: 10-12

Prerequisite: None

This is a course in the basics of Architectural, Civil and Structural Engineering. The students will gain knowledge in the Architectural areas of home design and construction, interior layout and design, landscaping, and materials manufacturing. They will also gain knowledge of Civil Engineering through the research and design of structures such as bridges, tunnels, highways and the characteristics and properties of materials used in the field, such as concrete, steel, plastics, etc.... Students will use both computer software and technical drawing components to design and construct models of real world structures. These activities will be STEM based and use the engineering design process. The activities will give the students experience in the areas of material testing, design, and model construction. These skills would benefit students as future engineers, builders and designers, as well as home owners and consumers.

#### **Classroom Rules and Procedures:**

- Food and drink should be kept concealed and away from the computer
- Computers are to be used for course work and assignments only.
- Do not abuse materials and tools.
- ABSOLUTELY NO HORSEPLAY!

All other school rules are followed and enforced plus the individual class required rules stated above.

#### **Grading:**

These courses are designed around hands on real life experiences. Therefore the bulk of the grade is established by hands on class experiences. Students are expected to work to their full potential and are judged on effort and work completed. Each student's ability and effort are taken into consideration when establishing a grade. Safety tests and additional exams will also be incorporated in the final grade.

**Grading Scale:**

91-100- A

81-90 B

70-80 C

60-69 D

0-59 F