**8th Grade Science Enrichment Syllabus**

**Mr. Warren Room 103**

**Course Objective:**

Students will practice STEM concepts using a variety of resources. Students will practice STEM applications in a cooperative learning setting.

**Expectations:**

All students are expected to come to class prepared each day. Attendance is also a MUST! Students are expected to give their best effort to accelerate their learning in each enrichment class.

**Course Content & Description:**

Lessons, tutorials, activities and quizzes are given in a traditional “hands on” format as well as on a computer using curiosity machine learning software. Students work in cooperative groups to discover experiment results and/ or to work on their prototypes. Core topics included are:

|  |  |
| --- | --- |
| **The Scientific Method** | **The Engineering Design Process** |
| - Developing Research Questions  - Developing Hypothesis  - Designing Experiments  - Conducting Experiments  - Collecting and Recording Data  - Analyzing Data and Drawling Conclusions | * Asking Questions * Determining Solutions * Developing Plans * Testing Your Plan * Improving Your Plan |

**Grading Scale:**

90-100% = A

80 – 89% =B

70-79% =C

60-69% =D

59% and lower =E

**Weighed Categories\***

Participation 20%

Classwork 20%

Quiz 20%

Lab/Projects 40%

**Lab Rubric:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Criteria** | | | | | **Score** |
|  | **4** | **3** | **2** | **1** |  |
| **Results / Product** | Student has followed all the individual rubric directions. | Student followed individual rubric directions, with few mistakes. | Student **barely followed** individual rubric directions, with many mistakes | Student has **not followed** individual **rubric** directions. |  |
| **Work Habits in Class** | Student **always** contributes to class in a positive way. | Student **mostly** contributes to class in a positive way. | Student **sometimes** contributes to class in a positive way. | Student **rarely** contributes to class in a positive way. |  |
| **Safety Skills** | Student is **always** safe when in groups and in class. Student **incorporates all safety precautions** | Student **safe majority of the time** both in groups and in class. | Student **does not** incorporate all safety precautions in class. | Student **does not** incorporate safety precautions in class and has injured themselves or classmates |  |
| **Behavior** | Student **always** follows school and class rules and procedures. | Student **usually** follows school and class rules and procedures | Student **sometimes** displays disruptive behavior during class. | Student **usually** displays disruptive behavior during class. |  |
| **Preparation** | Student is **always** prepared for class with assignments and required materials. | Student is **usually** prepared for class with assignments and required materials. | Student is **sometimes** prepared for class with assignments and required materials. | Student is **rarely** prepared for class with assignments and required materials. |  |
| Comments: | | | | **Score** |  |

\*There may be take home task for STEM projects.