

<b>COURSE TITLE</b>	8th Physical Science & Chemistry
<b>INSTRUCTOR</b>	Mr. Brian Knoop
<b>DEPARTMENT</b>	Science
<b>MEETING TIMES</b>	Daily

### **COURSE DESCRIPTION**

This course will explore many areas of Physical & Chemical Science including the structure of matter, motion, forces, energy, sound, light, waves, electricity and magnetism. In addition to exploring the above mentioned content areas the students will also work in the following areas; problem solving, observation, analytical skills, understanding of the metric system, the scientific method, reading comprehension and an understanding of graphs and data.

### **REQUIRED MATERIALS**

- Notebook
- Textbook
- Workbook
- Flash Drive

### **GRADES & SCORING**

**All Assignments Are Of Equal Value In Grading**

### **HOMEWORK, LAB REPORTS, COMP QUESTIONS, CHAPTER TEST, MI ACTIVITIES,**

**HOMEWORK:** This category will consist of written work, research and READING.

**LAB REPORTS:** This category will require the student to type up a report at the conclusion of certain labs. The student will be given a specific format for the report.

**COMP QUESTIONS:** The student will be required to read each chapter over a certain number of days. Upon completion of reading the chapter the student will then be given a set of approximately 25 questions and will then select any 12 of those 25 questions to answer. The student must answer at least 12 questions. These questions are typically multiple choice, fill in the blank, matching and true/false.

**CHAPTER TEST:** The student will take a chapter test at the conclusion of each chapter. The chapter test will typically be a short answer / essay type test with approximately 8-15 questions.

**MI ACTIVITIES:** At times the student will create a rubric and select a method based on Howard Gardner's areas of Multiple Intelligence's, utilizing an activity from one of those areas to convey their understanding of the content.

### **PAPERS & PROJECTS**

The student will be required to do some research on certain topic areas, utilizing the laptop computers in the science lab and a home computer if available.

### **ATTENDANCE & TARDINESS POLICY**

There are no bells throughout most of the day to signal the end/beginning of classes. However, you are traveling a short distance between most of your classes and you should be on time for class. We begin each class with a prayer, and if the door is closed and we are praying you are late.

## **AREAS OF STUDY**

1. Atoms, Elements and The Periodic Table
2. States of Matter
3. Properties and Changes of Matter
4. Motion and Momentum
5. Force and Newtons Laws
6. Energy
7. Work and Simple Machines
8. Thermal Energy
9. Sound
10. Waves
11. Electromagnetic Waves & Light
12. Electricity & Magnetism