

# Course Syllabus

8th Grade Physical Science | Summer 2021

## Objective:

Students will be introduced to different aspects of science in our physical world by learning the theories and fundamentals of physics and chemistry. Most importantly, I want my students to find joy in learning about our world through the lens of science so that they can find interest in their future STEM courses and potential careers.

# Prerequisites:

The only prerequisites for this class would be to have a basic understanding of mathematics at a 7th or 8th-grade level. I will try my best to explain complex concepts so that anyone with interests in physical science will gain full knowledge of this class.

#### **Instructor Contact Information:**

Scott Clark

Email: <a href="mailto:scott.clark@asdrp.org">scott.clark@asdrp.org</a>

#### Website and Online Resources:

We will be using Google Classroom for this course. Homework and additional resources will be posted there. Students can also post their questions or message me directly on Google Classroom where I will respond in a timely manner.

#### Class Times:

Lecture: Monday/Wednesday/Friday 4:30 PM - 6:00 PM

#### **Books and Course Material:**

Please bring a notebook and writing utensil to take notes. Also, bring a scientific calculator if you have one. The purchase of a textbook is NOT required for participation in this course. Any additional course material will be provided by me either through additional online resources or physically.

## Assignments:

I will regularly assign homework. Homework is optional, but highly recommended for students' own assessment. We will spend the first part of each class going over the previous homework. In-class assignments and/or quizzes will be given to promote learning as best as possible.



## Note Taking:

Please bring a notebook and pencil to take notes. This is not graded or collected, but it is a good habit to always take notes in any class for future reference, studying, or staying awake during lectures.

# Final Exam/Assignments:

While exams are a good way to test students on their knowledge of the material, my goal for this class is to make sure students retain their knowledge as well as possible so they build a strong fundamental for their future educational career. The format of this class's final is to be determined and will be tailored to ensure the student's knowledge of this class.

# Tentative Nature of the Syllabus:

The contents of this syllabus and the attached schedule are tentative in nature and may be subject to change or revision. The instructor holds the right to make changes to the schedule and/or organization of the class as necessary. Students and parents will be identified of any changes via email.

#### **Special Accommodations:**

If your student requires special accommodations, please notify the instructor as soon as possible.

## Tentative Schedule

Tentative Schedule		
Date	Lesson	Topic
Week 1 (Mon)	Lecture 1	Introduction to Physical Science
Week 1 (Wed)	Lecture 2	The Nature of Matter
Week 1 (Fri)	Lecture 3	Solids, Liquid, Gases
Week 2 (Mon)	Lecture 4	Elements and the Periodic Table
Week 2 (Wed)	Lecture 5	Atoms and Bonding
Week 2 (Fri)	Lecture 6	Chemical Reactions
Week 3 (Mon)	Lecture 7	Acids, Bases and Solutions
Week 3 (Wed)	Lecture 8	Carbon Chemistry
Week 3 (Fri)	Lecture 9	Motion and Energy
Week 4 (Mon)	Lecture 10	Forces
Week 4 (Wed)	Lecture 11	Forces in Fluids
Week 4 (Fri)	Lecture 12	Earth, Moon, and Sun
Week 5 (Mon)	Lecture 13	Exploring Space
Week 5 (Wed)	Lecture 14	The Solar System
Week 5 (Fri)	Lecture 15	Stars, Galaxies, and the Universe
Week 6 (Mon)	Lecture 16	Review for Final Exam
Week 6 (Wed)	Lecture 17	Final Exam
Week 6 (Fri)	Lecture 18	Review Final Exam
Week 6 (Fri)	Lecture 18	Review Final Exam