

## DAVID ORTEGA



### Introduction To Chemistry and Physics

#### Textbooks:

- *Exploring Creation with Chemistry and Physics* by Jeannie K Fulbright
- *Exploring Creation with Chemistry and Physics Notebooking Journal* by Jeannie K Fulbright (NJ)

NJ will be used for homework assignments.

Pages will **not need to be removed** from notebook. Students will receive their grade in class on the day they are due.

**Textbooks** should be brought to class each day.

#### Additional items:

- #2 sharpened pencil
- Paper

#### Class Summary:

Science is a method of studying, explaining, cataloging, and utilizing the resources God has given us. Studying our world and how it works should lead us into deeper and deeper awe of our Creator. We will not make the mistake that Paul talks about in **Romans 1:25**, “exchang[ing] the truth about God for a lie, and [worshiping] and [serving] created things rather than the Creator.”

We will do as much “hands-on” science as possible. I will give at least one week notice if I am requesting any supplies be brought for in-class experiments.

We will be going through a very well-written book that will provide students with a good overview of both *chemistry* and *physics*. The book is surprisingly dense in scope and we will at times dive a little deeper into particular concepts. Units are organized in the following way:

**UNIT 1** - Properties of Matter  
**UNIT 2** - States of Matter  
**UNIT 3** - Atoms  
**UNIT 4** - Compound Chemistry  
**UNIT 5** - Mixtures  
**UNIT 6** - Laws of Motion  
**UNIT 7** - Dynamics of Motion

**UNIT 8** - Energy  
**UNIT 9** - Sound  
**UNIT 10** - Light  
**UNIT 11** - Thermodynamics  
**UNIT 12** - Electricity  
**UNIT 13** - Magnetism  
**UNIT 14** - Simple Mechanics

## 1. Assignments

- HOMEWORK assignments, due **at the beginning** of each class:
  - Pages from the notebook journal
  - Reading sheets
  - Video summaries
  - Vocabulary definitions
  - Other writing
- IN-CLASS assignments
  - These often involve in-class reading and answering provided questions about the reading.
  - These assignments are worth as much as homework assignments. They cannot be made up later if class is missed.
- IN-CLASS presentation
  - We will do a few days where students will read about different types of **energy**.
  - They will study the pros and cons of various renewable and non-renewable sources.
  - They will then “present” their findings to the rest of the class.

## 2. Quizzes

- IN-CLASS quizzes will serve as a means to help review material. This discipline will aid student RECALL of information for tests.
- Only some quizzes will receive an official grade, at teacher’s discretion.

## 3. Tests

- We will take a test for **each** completed Unit.
- Note: There are **14 units** in the book
- I will always provide a **study guide** for tests. If you know the study guide, you will pass the test with flying colors.

#### 4. Participation

- Students must participate in class discussions (speaking in turn by raising their hands and being called on)
- Students must attend class regularly
- Students must arrive on-time to class
- Students must clean their desk area before leaving class

#### Google classroom

- All homework is assigned through *google classroom*. Students may be added with their personal email if desired.
- Some assignments may be completed online and submitted through *classroom*
- All homework must be submitted through *classroom* or in-person
- **I do not accept homework sent by email or text.** It is too hard to keep track of everything if I don't keep to this rule

#### Communication

- Please email me if your student will not be able to attend a class due to illness.
- All homework should be completed; in case of illness, it can be completed late with no points deducted.
- Please communicate with any other concerns or regarding prolonged illnesses.
- **Note:** Parents may not excuse their child from any assigned work unless it is a pre-arranged agreement with the instructor.

#### ABOUT ME

I am a consummate science nerd. In fact, physics was my favorite class in High School. The more I learn about science, the more I am impressed with God's amazing design of our world. I hope to share that passion, excitement, *and knowledge* with our students.

I have now taught at Vine Academy for three years. The school, students, and families hold a special place in my heart. I believe God has called us to this community, and I am honored to be a part of it.

My educational discipline is in biblical studies and pastoring – a subject that covers a wide range of disciplines, but not usually the natural sciences. However, I strive every day to ensure that I have done enough research to present accurate and compelling material to the students. My goal is for them to ask **even more** questions about creation – for example, considering the frequency detection of the photo-receptors we have in our eyes, how *do* we actually “see” the color *yellow*? God’s world stirs our imagination and affirms our desire to learn and discover.

I think this will be the best year yet.