

FOUNDATIONS OF PHYSICS  
SYLLABUS

**Mr. Stephen A. Roe**

Email: [sroe@westshorechristian.org](mailto:sroe@westshorechristian.org)

Foundations of Physics Web Site: <http://www.plutonium-239.com>

Course Description

“In Him was life, and the life was the Light of men. The Light shines in the darkness, and the darkness did not comprehend it.” (John 1: 4,5) Jesus is the Light of the world. The students will receive instruction in the physical laws that the Lord has created and to understand the basic principles involved in physics and chemistry. Included in the course is the study of motion, energy, simple machines, electricity, and an overview of Chemistry, with the study of the states of matter and structure of matter. The students will develop the ability to use mathematical laws to solve problems and the use of experimentation to demonstrate these laws.

Foundations of Physics covers the following concepts (†if time permits):

Nature of Science	Energy Debate
Composition of Matter	Energy
Kinetic Theory of Matter	Motion
Atoms and the Periodic Table	Forces
Chemical Bonding & Reactions	Waves
Acids and Bases	Electricity

Required Daily Materials

The following materials are required for each class. You will **not** be permitted to go to your locker once the bell rings.

1. Three-Ring Binder for *Organizing* Notes, Homework, Labs, and Handouts
2. Assignments
3. Scientific Calculator
4. Pen or Pencil with No. 2 (HB) Lead
5. Covered Textbook

Course Ethics

- A. Disruptions: When you disrupt another student, you are stealing their time and attention from the instruction. You are also not being respectful of the time, sacrifice, and money invested in other students to attend West Shore Christian Academy.
- B. Studying: You are expected to review your notes everyday. It is a 3-step process:
  1. Within the first 24 hours after you are given the notes for the first time, you are expected to identify what you know and what you don't understand. You are to contact me prior to class to identify your areas of need.
  2. As you continue to review these notes within the week, you should continue to “dialogue” with me until the information is clear to you.
  3. Once you have an understanding of the material, you need to continue to frequently review it and other previous notes so it is not forgotten and you can begin to apply that knowledge.
- C. Homework: The work you complete and submit for a grade in this class is to be your own. Copying from other students, online resources, or any other source and submitting it for a grade is cheating.
- D. Quizzes and Tests: The answers that you provide on quizzes and tests are to be solely from the information you have memorized and the skills you have acquired. The use of any non-approved resources (online resources, classmates, previous students, current students, notes, equations, cheat sheets, etc) is cheating.

### Classroom Expectations

1. Use good manners.  
For example, do not talk when another person is contributing to the lesson, raise your hand and wait quietly until you are given the floor, use appropriate language, etc.
2. Be respectful of others and their belongings.  
No touchy-feely
3. Be responsible for yourself.  
This includes (1) coming to class on time, (2) being prepared with required daily materials and your homework completed everyday, (3) completing the warm-up assignment in a timely manner, (4) leaving your cellphone in your book bag or locker, (5) keeping food or drink out of the lab, and (6) completing your other class's homework outside of my class.

**ANY BEHAVIOR THAT FALLS BELOW THESE EXPECTATIONS WILL NOT BE TOLERATED.**

### Grading Policy (Subject to Change)

Your grade will be determined by a weighting system. This system is broken down as follows:

<u>Work</u>	<u>Weighting</u>
Warm-Up & Daily Reviews	5 %
Homework, Class Work, Review Worksheets	30 %
Essential Questions	5 %
Laboratory Activities	15 %
Quizzes	10 %
Unit Tests	30 %
Summary (Ticket Out the Door/3-2-1)	5 %

### Tutoring Hours

Available upon request, times vary due to the schedule

### Absence from Class

In the event of your absence from class, it is **your responsibility** to contact another student in the class and check Renweb for homework information and the science web site for additional resources.

Partner Name: \_\_\_\_\_  
Contact Information: \_\_\_\_\_

- A. Class Notes:  
You are responsible for the information covered on the day(s) of your absence. Assignments may be available for download from the science web site.
- B. Handouts:  
I will place all handouts in the MISSED WORK bin in my room. It is your responsibility to pick them up on your day of return.
- C. Homework & Class Work:
  - (1) If homework or class work was collected on the day you were absent, it is due on the day of your return to school. It is your responsibility to place it in the IN bin in my room.
  - (2) If homework or class work was assigned on the day you were absent, it must be completed within two (2) days. It is your responsibility to place it in the IN bin within this time frame or a zero will be assigned.
- D. Tests and Major Quizzes (Over 5 points):  
Upon your return to school, you have two (2) school days to take the make-up test and/or major quiz. After two school days, a zero will assigned for that test and/or major quiz. See me to make arrangements.
- E. Labs/Experiments/Demos:  
Upon your return to school, the lab/experiment/demo must be completed within four school days. See me to make arrangements.