

APOLOGIA PHYSICS

Instructor: Rick Taylor

Class Code: **SCI410**

Class Time: Wednesdays 2-4pm (Fall semester)

Tuition \$75/semester; \$150/year

Full Year Academic Course

Materials Fee \$30 / semester; \$60/year

Total: \$105/semester; \$210/year

Description:

This course is designed to fulfill the requirements of a first level high school physics curriculum. It will prepare students with necessary background to be able to succeed in college physics courses. Students will gain information that will aid them in making career choices involving the physical sciences. Class will meet once a week for about 30 meetings.

Each class will be two hours, divided between lecture, discussion, problem solving and labs. The students must invest at least six hours a week at home reading chapters, working example problems and “on your own” problems, as well as end-of-chapter review, practice problems and tests.

Attendance at class meetings is extremely important in this course. Labs will generally be done in class. Difficulties with problem solving will be addressed in class time. If class is to be missed, notify the instructor in advance of the class meeting so necessary modifications of the class and communications with the student to be absent can be made. It is also essential that each student participate fully while in the class meeting in note-taking, discussing, problem solving and in lab activities. Also essential is spending necessary time at home to complete assignments in reading and problem solving.

Objectives and required student outcomes: 1. Students will be able to describe the scope and content of the study of physics

2. Students will be able to use the metric system and convert to various units of measurement.

3. Students will be able to list the natural forces and solve problems to predict the outcome of applied forces.

4. Students will be able to define energy and solve problems involving work and energy.

5. Students will be able to describe the properties of light and its interaction with matter.

6. Students will be able to describe the differences between magnetism and electricity and how they are related.

7. Students will gain confidence in their ability to solve problems

8. Students will show appreciation to God for how He governs created things so that they operate in orderly, predictable, and marvelous ways.

Enrollment: **Min:****Max:**

Pre-Requisites: Grades 10-12; completion of trigonometry or concurrently taking trigonometry

Required Text: *Exploring Creation through Physics* by Jay Wile; Apologia Press. 2nd edition only

Additional Materials: graphing calculator

Contact Information

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