

PHYSICAL SCIENCE SYLLABUS

WELCOME TO SOUTHWEST CHRISTIAN!

WELCOME TO YOUR FRESHMEN YEAR (you made it!)

WELCOME TO PHYSICAL SCIENCE!

INTRODUCTION:

The fundamental core of this class we will be centered on Yahweh- the God that Is. We will focus on the laws He has put into place, laws that all of creation must obey. As a Christian, I cannot think of anything more exciting than having the opportunity to study the work of the God that Is! I invite you on this journey. If you are not a Christian, I also invite you on this journey but on the condition that you honestly look at your life and determine whom your god(s) is (are). Then, compare the god(s) you worship with the God that Is.

EVALUATIONS- Each of the following will be part of each 3 week unit.

- Class Online Discussions- 3pts
- Discussion Leader- 5pts
- Online Test- 10 pts
- Math Quizzes- 5pts
- Classroom Lab- 5 pts
- Virtual Lab- 5 pts
- Terms- 1 pt
- Daily Work- points vary
- Interviews- 2 pts

CLASS SETUP

-Each Unit will cover a 3 week period. Within each 3 week period, you will be studying a new unit. Within each unit, you will be working towards fulfilling various requirements to help you learn the material. Some of the requirements are typical of most Science classrooms: labs, tests, quizzes. Other items will be computer based: virtual labs, online discussion forums, math practice and term quizzes. It is your task to complete each of the requirements

ONLINE DISCUSSION

-One item that is unique to this class is the participation of each student in online discussions. Each week, a member of your class will be selected to lead a discussion. The rest of the class will be required to add to the discussion (see Rubric) for the week.

TERMS

-Each week, new terms will be added to the required list. The terms will be added to Quizlet as well as Schoology. Term quizzes will take place on the last day of each week.

INTERVIEWS

-For each unit, you will participate in a Group discussion. These will be held either after school during Early outs or during 8th Period. See posted schedule

Grading Scale:

A	96-100
A-	92-96
B+	87-91
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	66- 69
D	63-65
D-	60-

COARSE STANDARDS/GOALS

A. Science will encourage students to take joy and delight in exploring and coming to understand God's world

(-Unifying Concepts and Processes)

- a. Systems, order, and organization
- b. Evidence, models, and explanation
- c. Change, consistency, and measurements
- d. Evolution and equilibrium
- e. Form and Function

B. Students are involved in designing experiments, making observations and contributing to existing knowledge in science

(-Science as Inquiry)

- a. Identify questions and concepts that guide scientific investigation
- b. Design and conduct scientific investigations
- c. Use technology and mathematics to improve scientific investigations
- d. Formulate and revise scientific explanations and models using logic and evidence
- e. Recognize and analyze alternative explanations and models
- f. Communicate and defend a scientific argument
- g. Understand scientific inquiry

C. Students will learn that physical and living things are created by God and not merely nature, environmental or natural resources

(-Physical Science)

- a. Structure of the atom

- b. Structure and properties of matter
- c. Chemical reactions
- d. Conservation of energy and the increase of disorder
- e. Interactions of energy and matter

D. Science is a human cultural activity through which God can be glorified and human life enhanced or used in life distorting ways

(-Science and Technology)

- a. Identify a problem or design an opportunity
- b. Propose designs and choose between alternative solutions
- c. Implement a proposed solution
- d. Evaluate the solution and its consequences
- e. Communicate the problem, process, and solution
- f. Understand science and technology

E. Through the study of science, students gain a deepened understanding of how they are the care-takers of creation and responsible to God for maintaining, developing and restoring it

(-Science in Personal and Social Perspectives)

- a. Personal and community health
- b. Population growth
- c. Natural resources
- d. Environmental quality
- e. Natural and human-induced hazards
- f. Science and technology in local, national, and global challenges

F. Students will study science in the context of human history and develop a Biblical perspective in personal and communal decision making

(-History and the Nature of Science)

- a. Science as a human endeavor
- b. Nature of scientific knowledge
- c. Historical perspective