

## Course Outline

School Year: 2007-2008

Course Title: Physical Science

Teacher: Mr. Miller

### Expected School-wide Learning Results (ESLR's):

The Science Department holds that its aim must be to support and implement the philosophy of Palma High School, to teach and witness the message of Jesus Christ in an atmosphere that encourages each person to develop spiritually, physically, socially and intellectually.

### Course Description:

This course is an introductory physical science designed to prepare students for upper division science classes. It provides a solid foundation in the fundamentals of chemistry and physics. Topics covered include introduction to properties/states of matter, motion and forces, work/power and machines, energy, electricity, waves, sound and light, optics, atomic structure, the periodic table, chemical bonds and reactions, solutions/acids & bases. Social, environmental and global impact is discussed where appropriate

### Course Objectives:

1. The student will be able to use methods of scientific measurement. This includes identifying the standard SI units and symbols, and converting to related SI units.  
ESLR'S Addressed: Intellectual Growth
2. The student will be able to distinguish between the laws of motion, the laws of gravitation, and the laws of work and energy, including conservation and apply them to real world problem situations.  
ESLR'S Addressed: Intellectual/Social Growth
3. The student will be able to compare and contrast the various classes of matter, its relationship to atoms, molecules, chemical bonds, and be able to use the Periodic Table to determine basic properties of elements.  
ESLR'S Addressed: Intellectual Growth
4. The student will be able to describe wave characteristics, including sound, electromagnetic radiation, light and color.  
ESLR'S Addressed: Intellectual
5. The student will be able to describe characteristics of optics including mirrors and lenses, light and sight.  
ESLR'S Addressed: Intellectual Growth
6. The student will demonstrate an ability to work responsibly in cooperation as a team for laboratory experiments, classroom activities, and projects.  
ESLR'S Addressed: Intellectual Growth

7. The student will report on physical science topics and their impact morally, environmentally, socially and globally through outside reading and research, utilizing a variety of medium, including computer software, online resources and projects.  
ESLR'S Addressed: Intellectual/Moral/Physical
8. The student will utilize the scientific method to evaluate and solve problems in physical science while completing quarterly projects.  
ESLR'S Addressed: Intellectual/Social/Physical Growth
9. The student will develop practical study and organizational skills through responsible maintenance of required materials.  
ESLR'S Addressed: Intellectual Growth
10. The student will acquire sufficient background to enter junior and senior level science classes offered at the school.  
ESLR'S Addressed: Intellectual Growth

#### Textbooks:

Lecture: Physical Science, Concepts in Action. Wysesession, ©2007 by Pearson Prentice Hall.

Lab: Lab Manual Physical Science, Concepts in Action. ©2007 by Pearson Prentice Hall.

#### Materials:

Computer & Internet Access: Absolutely required.

Textbook- required in class daily.

Notebook- required in class daily.

Lab Manual- required on lab day.

Pencils, erasers and pens (colored set recommended) etc.

#### Homework:

Homework assignment include 3 categories:

(1) Extensive reading of text and online sources.

(2) Required text and online homework.

(3) Lab reports.

Homework will be due at the beginning of class meeting after it was assigned. Student's names must be on the top of all work. Work submitted without a name, **will not** be graded, please note, this includes exams. Late work will not be accepted (exception is for excused absences). It is the student's responsibility to contact the teacher and make arrangements to complete missed assignments. Class assignments will be due at the end of the class the day they are assigned.

#### Testing:

A test will be given at the end of each chapter. Quizzes may be given at any time. Make up tests for low scores will not be permitted. Make up tests for excused absences will be done

by appointment, not during regular class time or exams. Again, it is the student's responsibility to contact the teacher and make arrangements to complete missed exam.

Evaluation:

1st - 4th Quarter Grades		1st and 2nd Semester Grades	
Tests and Quizzes	45%	1st Quarter Grade	42.5%
Homework	30%	2nd Quarter Grade	42.5%
Labs and Projects	15%	Final Exam Grade	15%
Conduct/Behavior	10%		

Grading Criteria:

In accordance with Palma's Student and Parent Handbook (pp.9)

Grades Online:

You can check your son's grades online. I highly recommend this as this is an extremely useful tool for students, parents, and teachers to communicate grade performance throughout the school year on a near real-time basis.

If you would like access to online grades, please check the appropriate box and add your password in the area indicated at the bottom of the outline above the signature lines. If you have any questions, please call me at school (831) 422-6391 x120.

Conduct:

I encourage you to read the section VIII a-k (pp. 25-30) in the Palma High School Student and Parent Handbook as it pertains to the students conduct in the classroom. I have a zero tolerance policy in my classroom for destructive behavior or disregard for the guidelines set forth in the Handbook. Students disregard will be dealt with swiftly.

Please sign and return this form by Friday August 21<sup>st</sup>, 2007

Email

Parents Email Address : \_\_\_\_\_

Online Grade Access

\_\_\_\_\_ Yes, I would like to be able to access my son's grades online.

Password \_\_\_\_\_ 6-24 characters (alpha-numeric)

\_\_\_\_\_ No, I do not wish to access at my son's grades online.

**Course Outline Review**

I have read and understand the course information and expectations presented above.

**Parent(s) or Guardian(s) Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

Student's Signature \_\_\_\_\_ Date \_\_\_\_\_