



Southern Lehigh School District

High School Syllabus

Physical Science

2014-2015

Course Description:

An introduction to the study of the physical sciences and the basics of scientific investigation. Introduction to Chemistry and Physics will emphasize

- Investigation (3 weeks) Chapter 1
- Chemistry (22 weeks) Chapter 2 thru Chapter 5
- Physics (11 weeks) Chapter 8 thru 10

This course, while not designed as a college preparatory requirement, can serve as a springboard to taking Chemistry I or Physics I in subsequent years. Physical Science A can also serve as the first half of the physical science requirement for students to be followed by Physical Science B. The students' background in mathematics is considered in determining appropriate instructional techniques and classroom applications.

Course Content:

- I. Introduction to Science
- II. Matter
- III. Atoms and Periodic Table
- IV. The Structure of Matter
- V. Chemical Reactions
- VI. Motion and Forces
- VII. Work and Energy
- VIII. Heat and Temperature

Required Textbooks and/or Other Reading/Research Materials

The textbook will be supplemented with internet sources and additional information and readings.

Chemistry by Wilbraham, Staley, Matta, and Waterman. Pearson, 2012.

Course Requirements:

Each student is required to complete all projects, tests and assignments. Failure to do so will affect the student's overall grade. While access to the internet is not necessary, it would allow the student to do research at home and assist in completing their projects.

Grade Components/Assessments:

Grades will be weighted based on a category percentage. Sapphire will automatically give a student's grade total as a weighted percentage based on the following category percentage breakdown:

Tests and Quizzes 30 % of the grade
Laboratory Activities 25 % of the grade
Projects 25 % of the grade
In-class activities/Homework 20 %

Since the emphasis of the class is on the evaluation and application of information to everyday problems, the majority of the grade for this class will come from laboratory activities and research projects. Students will work individually and in groups for the various activities and each activity will have a group and individual grade component in their assessment.

Each marking period is worth 20% of a student's overall grade. The final is worth 20% of a student's overall average:

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|--------------|------------|
| Quarter 1 | 20% |
| Quarter 2 | 20% |
| Quarter 3 | 20% |
| Quarter 4 | 20% |
| Final | 20% |

Required Summer Reading/Assignments:

No required summer reading