



# Southern Lehigh School District

High School Syllabus

---

## Chemistry I

2014-2015

### Course Description:

Chemistry I is the study of the properties of matter and the changes it undergoes. The study of chemistry is essential for students considering careers not only in chemistry, but also biology, engineering, and all health related fields. Topics covered in class include the states of matter, atomic structure, chemical compounds, chemical reactions, bonding, periodic law, and stoichiometry. These areas are also studied with appropriate laboratory investigations. Since the study of these topics is done both qualitatively and quantitatively with the frequent use of algebraic relationships, the student electing this course must have completed Algebra IA and IB with a grade of C or better.

### Course Content:

Matter and Energy  
Properties of Matter  
Changes in Matter  
Classes of Matter  
Measurement, Accuracy, and Precision  
Calculations by Factor Label Technique  
Atomic Structure  
Electron Cloud  
The Periodic Table  
Chemical Bonding  
Chemical Formulas  
Chemical Equations and Balancing  
Mass Relationships in Chemical Reactions

### Required Textbooks and/or Other Reading/Research Materials

Students will be reading and working problems supplied in the following textbook

Pearson Chemistry by Wilbraham, Antony, Dennis Staley, Michael Matta, and Edward Waterman. Pearson Education, 2012.

### Course Requirements:

Students are expected to come to class prepared with binders, pen and pencil, lab notebook, and a calculator. They are expected to complete all exams, quizzes, labs, and assignments on time.

If a student is absent, it is his/her responsibility to check the calendar on the teacher's website and to promptly make up that work. Refer to the policy in the student handbook for timelines to

make up missed work and assessments.

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:

Assessment 50% of the final grade  
Laboratory/Projects 30% of the final grade  
Homework/Classwork 20% of the final grade

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

Quarter 1	20%
Quarter 2	20%
Quarter 3	20%
Quarter 4	20%
<b>Final</b>	<b>20%</b>

Required Summer Reading/Assignments:

There is no summer reading assignment.