



Southern Lehigh School District

High School Syllabus

AP Chemistry

2014-2015

Course Description:

AP CHEMISTRY is designed to be equivalent to a college-level introductory chemistry course. A summer assignment is required and reviews information that was studied in CHEMISTRY I. Topics include gas laws, acid/base chemistry, equilibrium, kinetics, thermodynamics, electrochemistry, and descriptive chemistry. These topics will be covered through lecture, discussion and laboratory investigations. AP CHEMISTRY is appropriate for those students who are highly motivated and are ready for a demanding college-level course. Students are strongly encouraged to take the AP CHEMISTRY exam, at their own expense, and offered in May. Most colleges will award credit for a passing score on the exam. Students are advised to consult with their parents, guidance counselors, and teachers before selecting any AP course. This is a weighted course. A scientific calculator is required for this course.

Course Content:

Mass Relationships in Chemical Reactions
Reactions in Aqueous Solutions
The Gaseous State
Thermochemistry
Chemical Bonding and Molecular Geometry
Intermolecular Forces
Properties of Solutions
Chemical Kinetics
Chemical Equilibrium
Acids and Bases
Entropy and Free Energy
Electrochemistry
Descriptive Chemistry
Organic Chemistry

Required Textbooks and/or Other Reading/Research Materials

Students will be using a college-level textbook, that will be provided for them. They will be reading a large portion of the text and working problems that are included in the book.

Chemistry, 11th Edition by Raymond Chang and Kenneth Goldsby. McGraw-Hill, New York, NY, 2013.

Course Requirements:

Students are expected to be in class on time. They should come prepared to every class period by bringing their homework, 3-ring binders, pen/pencil, laboratory notebook, and a calculator. In addition to the regular class period, students should add the AP Chemistry Lab recitation during the Spartan Period to their schedules. Although not required, it will provide an opportunity to get extra help, review topics with other class members, make up lab work, and work through AP type problems. If a student is absent from class, it is his/her responsibility to check on the teacher's website for missed work 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 as a weighted percentage based on the following category percentage breakdown:

Assessment (exams and quizzes)	60% of the marking period grade
Laboratory/Projects	40% of the marking period grade

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

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

Required Summer Reading/Assignments:

A required Summer Assignment is provided, before summer vacation, to students who elect to take AP Chemistry. It may be found on the teacher's website as well. The assignment will be due in August, one week before school begins, and will count as an exam grade in the first marking period.