

NCLS Course Description

AP Chemistry /SAT Subject

Who should take this course?

Students who has taken the first-year high school Chemistry in the previous school year, who will start taking AP Chemistry in the current school year (September),

- would like to improve one's performance in AP Chemistry course
- plan to take AP Chemistry Exam and/or SAT Chemistry Subject test in early May or early June of spring semester of current academic year

What does this course do? The two primary objectives of this course are:

1. Improving students' understanding of chemistry principles and proficiency in applying these principles to problem solving. Students will improve their understanding of the fundamental concepts of chemistry and their problem solving skills by applying these principles.
2. Preparing students for the AP Chemistry Exam and SAT subject test. The course will provide information on the AP Chemistry Exam and SAT subject test, offer advice and guidance on preparing for the exam/test, and administer practice exams / tests.

Note: While this is a special course to help students prepare for AP Chemistry Exam and SAT subject test, the ultimate goal of the course is to improve students' understanding of the fundamental concepts of chemistry and their problem solving skills by applying these principles, so that one should see performance improvements of students in their high school AP Chemistry class.

This course does not offer hands-on laboratory experiments. Can students effectively learn and improve their performance in AP Chemistry Exam and SAT Chemistry test?

There will be in-class video display of demos of relevant chemistry lab experiments over the entire academic year.

Course Teaching Plan: The teaching curriculum is designed for the students who plan to take AP Chemistry Exam and SAT Chemistry Subject test in early May and June of current academic year. We will cover each unit below in about three-week period. We will have in class practice excises after each chapter each week.

UNIT 1 Atomic Structure and Properties

UNIT 2 Molecular and Ionic Compound Structure and Properties

UNIT 3 Intermolecular Forces and Properties

UNIT 4 Chemical Reactions

UNIT 5 Kinetics

UNIT 6 Thermodynamics

UNIT 7 Equilibrium

UNIT 8 Acids and Bases

UNIT 9 Applications of Thermodynamics