

Kendall Park Learning Center

Course: Honors Chemistry with Lab

Course Length:

Six weeks (140 hours with lab) equivalent to a full-year course.

Course Description:

This class will cover the fundamentals required *for* AP chemistry, with an emphasis on developing good mathematical skills for chemistry.

The method of instruction varies. Lecture is used for presentation of new concepts. Students are encouraged to participate frequently in class. Homework is assigned to enhance the daily session. It is designed to take students approximately 1 ½ to 2 hours each day. With the exception of the first and last day, quizzes are given frequently to assess the students' progress on covered material. A Lab Practical test will be given mid-semester that will cover all topics presented up to that point; it represents 10% of the final grade. All major tests are announced and a final exam is given to test student's knowledge of the material taught.

Requirement:

Students must pass with at least A- to receive full credit for this class.

Course Content:

1. *Matter and Measurement*
2. *Atoms, Molecules, and Ions*
3. *Chemical Formulas and Stoichiometry*
4. *Chemical Reactions:*
5. *Liquids and Solids*
6. *Gases*
7. *Electronic Structure and Periodicity*
8. *Bonding and Molecular Structure*
9. *Redox Reactions*
10. *Electrochemistry*
11. *Solutions*
12. *Thermochemistry*
13. *Chemical Equilibrium*
14. *Kinetics*
15. *Acids, Bases, and Salts*
16. *Organic Chemistry:*
17. *Nuclear Chemistry*

Text and Materials: Chemistry, Prentice Hall
Chemistry Laboratory Manual