

ROSLYN HIGH SCHOOL

DEPARTMENT: SCIENCE

NAME OF COURSE: HONORS CHEMISTRY

GENERAL DESCRIPTION OF COURSE

The curriculum is designed to prepare students for the Chemistry Achievement Exam (SAT II) as well as the New York State Regents exam. This course is also a pre-requisite for AP Chemistry. Emphasis is placed on concepts and problem solving. Laboratory experiments are integrated with course material so that students may learn from hands-on experiences. Student values are developed through discussions of consumer and environmental chemistry, as well as through the use of current events. The Honors Chemistry curriculum, as taught at Roslyn High School, far exceeds the minimum requirements of the New York State Regents examination.

MAJOR TOPICS COVERED

- ❖ Matter and Measurement
- ❖ Physical and Chemical Properties
- ❖ Atomic Structure: Atoms, Molecules and Ions
- ❖ Bonding
- ❖ The Periodic Table
- ❖ Mathematics of Chemistry: Stoichiometry
- ❖ Chemical Kinetics
- ❖ Equilibrium
- ❖ Acids and Bases
- ❖ Electrochemistry
- ❖ Organic Chemistry
- ❖ Nuclear Chemistry

TEXTBOOKS

Essential Chemistry, Chang, McGraw Hill

REQUIREMENTS

Honors students are expected to perform at a high level. This requires active participation in class, a positive attitude toward learning, responsibility toward materials and equipment, and self-motivation. Homework, laboratory reports, tests and quizzes contribute to each quarter grade. In preparation for the Regents exam laboratory reports must be submitted as evidence of performing at least 1200 minutes of laboratory work. Each student is required to complete a minimum of two-thirds of the laboratory reports in a satisfactory manner in order to pass each quarter.

GRADING PROCEDURES

Tests count as 70 percent of the quarterly grade. Laboratory reports count as 10 percent. Homework and class participation count as 10%. Quizzes count for 10%. The midterm exam counts as 20% of the 2nd quarter. The Regents examination counts as 20% of the 4th quarter. The final grade will be based upon the student's 4 quarter grades.