

## CHEMISTRY SYLLABUS 2020-21

MR. ABEL

[jack.abel@ndcswf.org](mailto:jack.abel@ndcswf.org)

TEXT: Texas Modern Chemistry, Houghton Mifflin Harcourt, 2015,  
by Sarquis and Sarquis

### Grade Determination:

Tests – 50%

Quizzes – 20%

Homework, Notebook – 10%

Labs – 20%

“Chemistry is the study of the composition of matter and the changes that matter undergoes. Because living and nonliving things are made of matter, chemistry affects all aspects of life and most natural events.” This quotation from a text defines chemistry in a concise way that shows its importance in our world. My main goals are: (1) to help the students to think analytically concerning matter in order to understand the natural world better; (2) to prepare at least some of the students for careers involving chemical studies/chemical knowledge; (3) to help the student to be an informed citizen understanding both the limitations and powers of science.

Aiding our understanding along the way we will use some lab experiments (generally, once a week) and demonstrations. Successful completion of Algebra I is a prerequisite.

Students are expected to abide by the section on ACADEMIC INTEGRITY on pp. 10-11 of the Student/Parent Handbook.

Also, they are expected to be respectful towards me and their fellow students at all times.

**First Quarter:** Introduction to Chemistry, Measurements and Calculations, Atoms: The Building Blocks of Matter, Arrangement of Electrons in Atoms, The Periodic Law

**Second Quarter:** Chemical Bonding, Chemical Formulas and Compounds, Chemical Equations and Reactions, Stoichiometry

**Third Quarter:** States of Matter, Gases, Solutions, Ions in Aqueous Solutions and Colligative Properties

**Fourth Quarter:** Acids and Bases, Acid-Base Titration and pH, Reaction Energy, Reaction Kinetics and Equilibrium

Supplies needed:

- 1) Spiral notebook
- 2) Folder with pockets
- 3) Blue or black pen
- 4) Notebook paper
- 5) Calculator (one that will do at least four functions)