

Syllabus & Pacing

1.) Course Description



Chemistry is the study of matter. In this course, you will study the following topics:

- Structure and characteristics of atoms.
- The organization of the periodic table.
- Compounds and their properties.
- Chemical Reactions
- Solutions

Within each unit, there are a number of lessons. Quizzes or assignments are designed to assess your understanding of an individual lesson. Tests are designed to assess your understanding of the unit as a whole.

Most units contain a lab activity. Many of these are digital simulations, but others use classroom-safe materials. The goals of lab activities in this course is to collect and interpret data to further your understanding of the concepts. Where possible, you will have the opportunity to write your own procedures for the labs. This is to improve your ability to use scientific processes.

2.) Course Requirements

All courses require you to have access to a working computer and to the Internet.

Students will need 6 Alka Seltzer tablets, timer, small pot, spoon, and stove in order to complete the hands-on lab.

**** Note, modified or alternative labs can be provided to students who do not have the required materials. ****

All assignments will be graded through OnFire. Any attachments must be made in a Word document file, PDF, or Google Doc shareable link and turned in through OnFire or directly to the instructor.

Online Technologies

This course takes place online. Since we will not meet face-to-face, you must have the necessary technology and technical know-how to work effectively in this online learning environment. This online course will utilize OnFire as the learning management system. Please get in touch with your instructor if you have trouble logging in or viewing any of the documents and links posted.

3.) Grade Breakdown

Grading Procedures

A 94-100%	C 73-76%
A- 90-93%	C- 70-72%
B+ 87-89%	D+ 67-69%
B 83-87%	D 63-66%
B- 80-82%	D- 59-63%
C+ 77-79%	F 58% or below

Grade Weight Groups:

- Quizzes 30%
- Post-Assessments: 15%
- Tests: 15%
- Assignments and Labs: 40%

Parents/Guardians will be able to observe and view their student's progress through Spark.

4.) Pacing Guide

Tentative Course Schedule

A typical semester course at a traditional high school requires 80 hours in total, which is 40 hours per term. Since this is a self-paced course, completing it may take you longer or shorter. You are expected to spend 3-5 hours each week and submit at least one unit each.

Students can complete the course at a pace that best suits them. You are responsible for completing and turning in all assignments according to their individual needs. However, make sure to look at your school's deadlines, to ensure that you are completing courses on track.

Parents/Guardians can observe and view their student's progress through OnFire.

Term 3

Week 1	Unit: Physical and Chemical Properties <input type="checkbox"/> Safety Contract <input type="checkbox"/> Lesson and QUIZ: Physical and Chemical Properties
Week 2	Unit: Physical and Chemical Properties <input type="checkbox"/> Lesson and QUIZ: Properties of Elements and Compounds <input type="checkbox"/> Lesson and QUIZ: Comparing Ionic and Covalent Compounds
Week 3	Unit: Physical and Chemical Properties <input type="checkbox"/> Lab: Comparing Ionic and Covalent Compounds <input type="checkbox"/> Test: Physical and Chemical Properties

Week 4	<p>Unit: Chemical Reactions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lesson and Quiz: Chemical Reactions <input type="checkbox"/> Lesson and Quiz: Writing Chemical Equations <input type="checkbox"/> Lesson and Quiz: Balancing Chemical Equations I
Week 5	<p>Unit: Chemical Reactions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lesson, Quiz and Assignment: Balancing Chemical Equations II <input type="checkbox"/> Lesson and Quiz: Endothermic and Exothermic Reactions
Week 6	<p>Unit: Chemical Reactions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lesson and Quiz: Batteries <input type="checkbox"/> Lab: Endothermic/Exothermic <input type="checkbox"/> Unit Test: Chemical Reactions
Week 7	<p>Unit: Stoichiometry</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lesson, Quiz and Lab: Moles <input type="checkbox"/> Lesson and Quiz: Stoichiometry
Week 8	<p>Unit: Stoichiometry</p> <ul style="list-style-type: none"> <input type="checkbox"/> Unit Test: Stoichiometry <input type="checkbox"/> Term 3 Post-Assessment and Grade Submission

Term 4

Week 1	<p>Unit: Reaction Rates and Equilibrium</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lesson and QUIZ: Collision Theory <input type="checkbox"/> Lesson and QUIZ: More Factors that Affect Reaction Rate
Week 2	<p>Unit: Reaction Rates and Equilibrium</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lesson and QUIZ: Dynamic Equilibrium <input type="checkbox"/> Lesson and QUIZ: Factors That Affect Equilibrium <input type="checkbox"/> Lab: Alka Seltzer
Week 3	<p>Unit: Reaction Rates and Equilibrium</p> <ul style="list-style-type: none"> <input type="checkbox"/> Unit Test: Reaction Rates and Equilibrium <p>Unit: Solutions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lesson and QUIZ: Solutions <input type="checkbox"/> Lesson and Assignment: Modeling Solutions

Week 4	Unit: Solutions <input type="checkbox"/> Lesson and Quiz: Concentration <input type="checkbox"/> Lesson and Quiz: Molarity and Molality <input type="checkbox"/> Assignment: Solubility Lab
Week 5	Unit: Solutions <input type="checkbox"/> Unit Test: Solutions Unit: Colligative Properties <input type="checkbox"/> Lesson and Quiz: Introduction to Colligative Properties <input type="checkbox"/> Lesson and Quiz: Major Colligative Properties <input type="checkbox"/> Lesson: Applications of Colligative Properties
Week 6	Unit: Colligative Properties <input type="checkbox"/> Test: Colligative Properties Unit: Acids and Bases <input type="checkbox"/> Lesson, Quiz and Lab Introduction to Acids and Bases
Week 7	Unit: Acids and Bases <input type="checkbox"/> Lesson and Quiz: The pH Scale <input type="checkbox"/> Lesson and Quiz: Titrations <input type="checkbox"/> Assignment: Soil pH Research Assignment
Week 8	Unit: Acids and Bases <input type="checkbox"/> Unit Test: Acids and Bases <input type="checkbox"/> Term 4 Post-Assessment and Grade Submission