Course Overview and Syllabus

Chemistry

Course Number: SC1116
Grade level: 10–11
Credits: 1.0
Prerequisite Courses: None

Course Description

A fascinating look into the composition, structure, and reactions of matter, SC1116 encourages high school students to study of the composition, properties, changes to, and interactions of matter. Over the course of two semesters, students engage in lessons that unlock the mysteries of the elements that make up our planet, covering subject such as atomic structures, the periodic table, and chemical bonding. Compelling course content challenges students and inspires further inquiry into more advanced levels of chemistry.

Course Objectives

Throughout the course, you will meet the following goals:

- Trace the development of the atomic theory
- Understand the composition and properties of matter and the changes that matter undergoes
- Examine the relationship between the elements on the periodic table
- Describe chemical reactions, interactions, and cause-effect relationships in real-world applications
- Apply critical thinking, reasoning, and decision making skills to solve problems involving chemistry
- Understand and appreciate how chemistry affects daily life and society

Student Expectations

This course requires the same level of commitment from you as a traditional classroom course would. Throughout the course, you are expected to spend approximately 5–7 hours per week online on the following activities:

- Interactive lessons that include a mixture of instructional videos and tasks
- Assignments in which you apply and extend learning in each lesson
- Assessments including quizzes, tests, and cumulative exams

Communication

Your teacher will communicate with you regularly through discussions, e-mail, chat, and system announcements. Through this communication with your teacher, you will monitor your progress through the course and improve your learning by reviewing material that was challenging for you.

You will also communicate with classmates, either via online tools or face-to-face, as you do the following:

- Collaborate on projects
- Ask and answer questions in your peer group
- Develop speaking and listening skills

Grading Policy

You will be graded on the work you do online and the work you submit electronically to your teacher. The weighting for each category of graded activity is listed below.

Assignments	10%
Labs	0%
Lesson Quizzes	20%
Unit Tests	50%
Cumulative Exams	20%
Additional	0%

Scope and Sequence

When you log into the Virtual Classroom, you can view the entire course map, which provides a scope and sequence of all topics you will study. Clicking a lesson's link in the course map leads to a page listing instructional activities, assignments, and learning objectives specific to that lesson. The units of study are summarized below.

Unit 1: Atomic Structure and the Periodic Table

Unit 2: Chemical Bonding

Unit 3: Matter

Unit 4: Acids, Bases, Mixtures, and Solutions

Unit 5: Stoichiometry

Unit 6: Chemical Reactions

Unit 7: Nuclear and Electrochemistry

Unit 8: Organic and Biochemistry