

## High School Chemistry Course Outline

2020-2021

Mr. Tomlinson, Room 12

### CONTACT

If you have any questions or concerns, please feel free to contact me anytime at [ktomlinson@tokyoips.com](mailto:ktomlinson@tokyoips.com).

### TEXTBOOK

Pearson Chemistry

### DESCRIPTION OF COURSE

This course will explore the wonders of chemistry. Students will learn the properties and characteristics of atoms and how they interact with one another to create compounds that are useful in our everyday life. Through practical lab experience, they will learn to identify, measure and quantify desired compounds within a reaction.

### EXPECTATIONS IN THE CLASSROOM

You must bring to class:

- Pencil
- Eraser
- Ruler
- Pen
- Science Binder
- Lab Notebook
- Planner
- Relevant grading sheets/worksheets/textbooks
- Work due

Getting ready: When you come into class, get all of your materials out on the table in front of you, including your homework. To be on time for class, you must be at your desk with your materials out by the end of the bell.

Please put any personal equipment in your bag and then put your bag safely on a spare chair or under the table.

Food and Drinks: No food is permitted in class. Drinks are permitted in class except on lab days.

Homework: Please write your homework task down in your planner.

Leaving the room: Please do not leave the room without asking.

Late Assignments: Any assignments/projects/lab reports that are late, without having made arrangements with the teacher at least one week prior, will have 2% of their total mark for that assignment deducted for each day it is late.

Tests: If you miss a test and did not discuss your absence with the teacher at least one week before the test or have a note explaining your absence, you will receive a zero on that test.

### GRADING

Your grade will be determined by your work in these categories:

**1) Daily work** – 30% of your grade.

Daily work is anything we complete in class including practical experiments, worksheets, and discussions.

**2) Projects** – 30% of your grade.

Projects are longer tasks, designed to practice skills including research, organization, group work, and presentation. They will usually take more than one class period to complete and will involve completing some of the work outside of class time.

**3) Quizzes** – 20% of your grade

Short assessments between 5-10 questions, taking 5-10 minutes to complete. Used to check your progress throughout the course.

#### 4) Tests – 20% of your grade

Chapter exams cover all the material learned in one chapter. They will be completed without using your notes.

The grading scale for this course will be:

Letter grade	Mark range
A+	97-100
A	92-96
B+	88-91
B	83-87
C+	79-82
C	74-78
D+	70-73
D	65-69
F	64 or below

#### PLAGIARISM POLICY

Students who hand in school work that is not their own are guilty of *plagiarism*. Students who plagiarize will be dealt these consequences:

##### First offence:

- phone call to parents and the work redone and the grade reported
- explain to parents consequence for second offence

##### Second offence:

- phone call to parents and the work redone and assessed, with the grade of "0" recorded
- explain to parents consequence for third offence

##### Third offence

- phone call to parents and the work redone and assessed, and a grade of "0" recorded
- Saturday School assigned by school administration
- explain to parents the consequence for fourth offence

##### Fourth offence

- phone call to parents and the work redone and assessed, and a grade of "0" recorded
- 2 day Out of School Suspension by school administration
- preamble with parents expulsion on fifth offence

##### Fifth offence

- expulsion

#### COURSE CONTENT

*Note: course content and test dates are subject to change throughout the year.*

##### Unit 1: Introduction to Chemistry and Safety (Chapters 1, and 2)

- Lab Safety
- Chemistry as the Central Science
- Matter and Change

##### Unit 2: Scientific Measurement

- Scientific Measurement and Notation

**Unit 3: Atoms (Chapters 4 and 5)**

- Atomic structure
- Electrons in Atoms

**Unit 4: Organizing the Elements (Chapters 6, 7 and 8)**

- The Periodic Table
- Ionic and Metallic Bonding
- Covalent Bonding

**Unit 5: Nomenclature (Chapters 9)**

- Chemical Names of Formulas
- Covalent Bonding

**Unit 6: Quantities of Chemicals (Chapter 10)**

- Chemical Quantities

**Unit 7: Reactions and Calculations (Chapters 11)**

- Chemical Equations
- Reaction Types

**Unit 8: Introduction to Stoichiometry (Chapter 12)**

- Stoichiometry

**Unit 9: States of Matter and Behavior of Gases (Chapters 13 and 14)**

- States of Matter
- Changes in State of Matter
- Behavior of Gases
  - o Ideal gas laws

**Unit 10: Solutions (Chapters 15, 16 and 19)**

- Water and Aqueous Systems
- Solutions
- Acids, Bases and Salts

**Unit 11: Carbon Chemistry (Chapter 22 and 23)**

- Hydrocarbon compounds
- Functional Groups

**IMPORTANT DATES**

*Note: Test dates are subject to change throughout the year*

<b>Subject</b>	<b>Proposed Test Dates</b>
Unit 1	September 11
Unit 2	September 25
Unit 3	October 16
Unit 4	November 6
Unit 5	November 27
Unit 6	December 18

Research Project #1	December 18
<b>Midterm Exam</b>	<b>January 15</b>
Unit 7	January 29
Unit 8	February 26
Unit 9	March 19
Unit 10	April 30
Unit 11	June 4
Research Project #2	June 11
<b>Final Exam</b>	<b>June 17</b>