



## CENTENNIAL REGIONAL HIGH SCHOOL

### COURSE OUTLINE 2023-2024

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**Subject:** Chemistry

**Level:** Secondary 4 TAG - Secondary 5

**Prerequisite:** Eight Science credits at the cycle 2 year 2 level

#### Course Description and Objectives:

This course is designed to prepare students for entrance into Pure and Applied Science, Health Science, or a technology program at the CEGEP level.

#### Course Concepts

1. Gases: Kinetic molecular theory, gas laws, stoichiometry
2. Thermochemistry: kinetic and potential energy in molecules, predicting and measuring the heat energy in physical and chemical changes, calorimetry and Hess' Law.
3. Reaction Kinetics: measuring reaction rate, factors influencing reaction rate
4. Chemical Equilibrium: qualitative and quantitative aspects, Le Chatelier's Principle, ionic equilibrium of acids and bases, pH scale, titration

#### Evaluation:

The program focuses on the development of two interrelated competencies associated with various complementary aspects of science and technology.

The two competencies to be further developed in secondary cycle two, year one as follows:

- Seeks answers or solutions to scientific or technological problems
- Makes the most of his/her knowledge of science and technology

As part of their evaluation, all students enrolled in Chemistry may do a Science Fair project.

**Safety glasses or goggles are required for laboratory work. (School will provide 1 set per laboratory)**

*\*Please note that every student is responsible for ALL classes missed and is required to communicate with their teacher ASAP for any work, information, and notes.*

*\*\*Please refer to the Faculty & Staff Directory at <http://www.crhs.rsb.qc.ca/> for your teacher's email/website address*