



CENTENNIAL REGIONAL HIGH SCHOOL

COURSE OUTLINE 2020-2021

Subject: Chemistry

Level: Secondary 4 TAG - Secondary 5

Prerequisite: Eight Science credits at the cycle 2, year 2

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

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