

# Grand River Collegiate Institute COURSE OUTLINE

For students and their families.

Course Name : Course Code :

Grade 12 College Chemistry SCH4CI

Curriculum Document http://www.edu.gov.on.ca/eng/curriculum/secondary/

CH4CI SNC2DI/2PI

**Prerequisite:** 

Textbook: Chemistry 12 – College Preparation (Nelson)

### COURSE DESCRIPTION

This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment. Students will use a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment.

## UNITS / "Big Ideas"

#### Matter and Qualitative Analysis

- The properties of matter can be predicted and analysed qualitatively.
- Substances can be identified based on their distinct properties.
- Qualitative analysis of matter is used in many different fields of endeavour.

#### Organic Chemistry

- Organic compounds have predictable chemical and physical properties determined by their respective structures.
- Organic compounds can be synthesized by living things or through artificial processes.
- Organic chemical reactions and their applications have significant implications for society, human health, and the
  environment.

### **Electrochemistry**

- Oxidation and reduction are paired chemical reactions in which electrons are transferred from one substance to another in a predictable way.
- The control and applications of oxidation and reduction reactions have significant implications for society and the environment.

#### Chemical Calculations

- · Relationships in chemical reactions can be described quantitatively.
- Quantitative relationships of chemical reactions have applications in the home, workplace, and the environment.

#### Chemistry in the Environment

- Air and water quality can be affected by both natural processes and human activities.
- Quantitative relationships of chemical reactions can be used to assess air and water quality.

Refer to <a href="http://www.edu.gov.on.ca/eng/curriculum/secondary/2009science11\_12.pdf">http://www.edu.gov.on.ca/eng/curriculum/secondary/2009science11\_12.pdf</a> for all of the Essential Learning Skills and Expectations.

## **PROCEDURES**

Late and Missing Assignments: It is important for students to develop good personal management skills (such as time management and planning). These skills will be reflected in the learning skills area of the report card. It is expected that students will complete and submit all essential tasks as they are the opportunity for you to demonstrate your learning to your teacher.

**Attendance:** Attendance in classes is an important part of learning, and absences should be avoided. When a student is absent, a parent/guardian must call the school's attendance line on the date of absence, or provide a note explaining the absence for the student to submit the following day. Students are responsible for what they missed during their absence.

**Cheating and Plagiarism:** It is important for students to do their own best work. Most assignments for this class are done within the classroom, observed by the teacher, and this helps to minimize the chances of cheating and plagiarism. In the event that cheating or plagiarism occurs, the following consequences may be implemented, in consultation with administration, depending on the situation:

- 1. The student may be required to redo all or part of the assignment or assessment.
- 2. The student may be required to complete an alternate assignment or assessment.
- 3. The student's work may be treated as a missed assignment.

There may also be other consequences that are determined to be appropriate (e.g. detention, suspension, etc.) as per the school's progressive discipline process. Parents/guardians will be informed about the infraction and the consequences.

Please refer to the school website: <a href="http://grc.wrdsb.ca/about/policies">http://grc.wrdsb.ca/about/policies</a> for more details on these policies and other academic procedures.

Signatures	
Please sign below indicating you have read and understand th	e requirements for successful
completion of this course.	
Student	Parent/Guardian