



## Grand River Collegiate Institute COURSE OUTLINE

*For students and their families.*

**Course Name**

**Chemistry, Grade 11, University Preparation**

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

**Course Code**

**SCH 3U**

**Prerequisite**

SNC 2DI

**Teacher**

Mr. McCloskey

**Contact**

519-576-5100 (ext.6034)

**Textbook**

Nelson Chemistry 11 (Replacement Cost: \$99.95)

**Course Description:**

This course enables students to deepen their understanding of chemistry through the study of the properties of chemicals and chemical bonds; chemical reactions and quantitative relationships in those reactions; solutions and solubility; and atmospheric chemistry and the behaviour of gases. Students will further develop their analytical skills and investigate the qualitative and quantitative properties of matter, as well as the impact of some common chemical reactions on society and the environment.

**Essential Learnings/Expectations/Skills** - To be successful in this course you **must** be able to demonstrate **all** of these essential expectations. These will be clearly communicated to you throughout the course.

**Scientific Investigation Skills and Career Exploration (throughout the course):**

- Demonstrate scientific investigative skills (related to both inquiry and research) in the four areas of skills (initiating and planning, performing and recording, analysing and interpreting, and communicating).
- Identify and describe careers related to the fields of science under study, and describe the contributions of scientists to those fields.

**Matter, Chemical Trends, Chemical Bonding (Strand B):**

- Analyse the properties of commonly used chemical substances and their effects on human health and the environment, and propose ways to lessen their impact
- Investigate physical and chemical properties of elements and compounds, and use various methods to visually represent them
- Demonstrate an understanding of periodic trends in the periodic table and how elements combine to form chemical bonds.

**Chemical Reactions (Strand C):**

- Analyse chemical reactions used in a variety of applications, and assess their impact on society and the environment
- Investigate different types of chemical reactions
- Demonstrate an understanding of the different types of chemical reactions

**Quantities in Chemical Reactions (Strand D):**

- Analyse processes in the home, the workplace, and the environmental sector that use chemical quantities and calculations, and assess the importance of quantitative accuracy in industrial chemical processes
- Investigate quantitative relationships in chemical reactions, and solve related problems
- Demonstrate an understanding of the mole concept and its significance to the quantitative analysis of chemical reactions.

**Solutions and Solubility (Strand E):**

- Analyse the origins and effects of water pollution, and a variety of economic, social, and environmental issues related to drinking water;
- Investigate qualitative and quantitative properties of solutions, and solve related problems
- Demonstrate an understanding of qualitative and quantitative properties of solutions

**Gases and Atmospheric Pressure (Strand F):**

- Analyse the cumulative effects of human activities and technologies on air quality, and describe some Canadian initiatives to reduce air pollution, including ways to reduce their own carbon footprint
- Investigate gas laws that explain the behaviour of gases, and solve related problems
- Demonstrate an understanding of the laws that explain the behaviour of gases

**EVALUATION – Evidence of Learning****Formative Assessment:**

There will be many ongoing formative assessments throughout the course. Formative assessments serve as practice for students prior to being evaluated (summative assessment). The ongoing feedback helps students to recognize their strengths and weaknesses and provides information to the teacher regarding next steps for the student's learning. In the case where, due to extenuating circumstances, a student has been unable to complete a summative assessment, formative assessments may be used as additional evidence to support the teacher's professional judgment when determining a final grade.

**Summative Assessment:**

Summative assessment will occur near the end of the unit/instruction and demonstrates the student's knowledge for the purpose of evaluation and reporting. These assessments will be included in the mark shown on the student's report card.

The types of formative and summative assessments are outlined below:

<b>Assessment Technique</b>	<b>Purpose</b>
Quizzes – (on-line and in-class)	Formative
Laboratory Reports	Formative and Two Major Summative Reports
Tests (one per strand)	Summative
Assignments (one per strand)	Summative

<b>Final Grade</b>	
Term Work	
• Tests	45 %
• Lab Reports and Assignments	25 %
Final Written Exam – 2 Hour Exam	30 %

Refer to the **GRCI Web Site** [www.grc.wrdsb.ca](http://www.grc.wrdsb.ca) for Assessment, Evaluation and Reporting Policies as well as Academic Honesty and Late Policies.

## 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: <http://grc.wrdsb.ca/about/policies> for more details on these policies and other academic procedures.

## Signatures

Please sign below indicating you have read and understand the requirements for successful completion of this course.

\_\_\_\_\_  
Student Name

\_\_\_\_\_  
Parent/Guardian Name

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Parent/Guardian Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\_\_\_\_\_  
Daytime phone number

\_\_\_\_\_  
Evening phone number

\_\_\_\_\_  
Email address