

**Guelph Collegiate Vocational Institute  
Upper Grand District School Board**

Course Outline



**Department: Science**

**Course Title: Chemistry**

**Course Type: University Preparation**

**Grade: 11**

**Course Code: SCH 3U**

**Credit Value: 1.0**

**Department Head: Ms. Carrie Warren**

**Teachers: Ms. Sandra Bowland, Mr. Lee Maggs, Ms. Sunniva Ronzio**

**Teacher email: (not mandatory)**

**Date of Development: 2015/2016**

**Curriculum Document:**

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

**Course Prerequisites/Corequisites:**

**SNC 2D**

**MPM 2D (recommended)**

**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.

## Term Work (70% of the final mark)

### Unit Title and Culminating Tasks

1) Matter, Chemical Trends, and Chemical Bonding  
- unit tests

2) Chemical Reactions  
- unit tests and lab report

3) Quantities in Chemical Reactions  
- unit tests and lab report

4) Solutions and Solubility  
- unit tests

5) Gases and Atmospheric Chemistry  
- independent study notes and quizzes

### Big Ideas

#### **1) Matter, Chemical Trends, and Chemical Bonding**

Every element has predictable chemical and physical properties determined by its structure. The type of chemical bond in a compound determines the physical and chemical properties of that compound.

#### **2) Chemical Reactions**

Chemicals react in predictable ways.

#### **3) Quantities in Chemical Reactions**

Relationships in chemical reactions can be described quantitatively.

#### **4) Solutions and Solubility**

Properties of solutions can be described qualitatively and quantitatively, and can be predicted.

#### **5) Gases and Atmospheric Chemistry**

Properties of gases can be described qualitatively and quantitatively, and can be predicted.

## Culminating Tasks/Exams (30% of the final mark)

### Course Culminating Task/Exams and Description

Final exam covering all five units of study

Based on the range of students' learning needs, a selection from the strategies listed below may be utilized. Refer to [list of teaching and assessment strategies](#).

**Teaching Strategies:**

- differentiated instruction
- scaffolding
- explicit instruction
- guided practice

**Assessment and evaluation strategies:**

Formative Assessment

- peer and self-assessment
- quizzes

Summative Assessment

- tests
- lab reports

**Textbooks/Learning Resource Materials (align with Policy 603)**

Nelson Chemistry 11

**Fees for Learning Materials/Activities**

| Learning Materials/Activities | Cost |
|-------------------------------|------|
|                               |      |
|                               |      |
|                               |      |
|                               |      |

Please refer to the [GCVI Student Handbook](#) for our school policies on:

- academic integrity
- late and missed assignments