


<p>Guelph Collegiate Vocational Institute Upper Grand District School Board</p> <p>Course Outline</p> 	<p>Department: Science</p> <p>Course Title: Environmental Science</p> <p>Course Type: Workplace Prep.</p> <p>Grade: 11</p> <p>Course Code: SVN3E</p> <p>Credit Value:1.0</p>
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<p>Curriculum Document: The Ontario Curriculum, Grades 11 and 12 https://www.edu.gov.on.ca/eng/curriculum/secondary/2009science11_12.pdf</p>	<p>Course Prerequisites/Corequisites: Grade 9 Science, Applied or Academic, or Grade 9 or 10 locally developed compulsory credit course in science</p>
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<p>Course Description: This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in work and life after secondary school. Students will explore a range of topics, including the impact of human activities on the environment; human health and the environment; energy conservation; resource science and management; and safety and environmental responsibility in the workplace. Emphasis is placed on relevant, practical applications and current topics in environmental science, with attention to the refinement of students' literacy and mathematical literacy skills as well as the development of their scientific and environmental literacy.</p>

Term Work (70% of the final mark)

Unit Title, Big Ideas, and Unit Culminating Tasks

Unit 1: *Scientific Solutions to Contemporary Environmental Challenges*

Big Ideas:

- Current environmental issues are complex, and may involve conflicting interests or ideas.
- Scientific knowledge enables people to make informed decisions about effective ways to address environmental challenges.

Unit Culminating Tasks:

- Project
- Summative Quiz

Unit 2: **Natural Resource Science and Management**

Big Ideas:

- Biodiversity is a measure of the health and sustainability of an ecosystem. Careful resource management planning is necessary to sustain ecosystems.

Unit Culminating Tasks:

- Case Study
- Project
- Unit Test

Unit 3: **Human Impact on the Environment**

Big Ideas:

- The biotic elements of an ecosystem include humans. Abiotic and biotic factors interact within an ecosystem.
- People have positive and negative effects on the environment, both locally and globally.

Unit Culminating Tasks:

- Waste Audit Report
- Unit Test

Unit 4: **Energy Conservation**

Big Ideas:

- The impact of energy production and consumption on environmental sustainability depends on which resources and energy production methods are used.

Unit Culminating Tasks:

- Project
- Unit Test

Unit 5: **Human Health and the Environment**

Big Ideas:

- Environmental factors can have negative effects on human health.
- It is possible to minimize some of the negative health effects of environmental factors by making informed lifestyle choices and taking other precautions.

Unit Culminating Tasks:

- Project
- Unit Test

Culminating Tasks/Exams (30% or the final mark)

Course Culminating Task/Exams and Description
Final Exam (15%)
Portfolio Assignment (15%)

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:

class discussion, teacher demonstrations, simulations, paired or small group lab, video presentations, field trips, guest speakers, paired or small group directed lab activities, small group discussion, use of graphic organizers, informal lab reports, PEOE investigations, research on STSE and careers, news article review, case studies

Assessment and evaluation strategies:

Case studies, ongoing project work, written and/or oral presentations, individual assignments including lab and field work, teacher conferences, peer assessment, self-assessment, unit tests

Textbooks/Learning Resource Materials (align with Policy 603)

Environmental Science Interactions
Edvantage Interactive, 2010

Fees for Learning Materials/Activities

Learning Materials/Activities	Cost
	Field Trips may have costs

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

- academic integrity
- late and missed assignments