



## Grade 11 Environmental Science Workplace Preparation

### SVN 3E1

#### Course Overview

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.

#### Units of Study

##### Unit 1: Human Impact on the Environment

- Analyze selected current environmental problems in terms of the role human activities have played in creating or perpetuating them, and propose possible solutions to one such problem;
- Investigate air, soil, and water quality in natural and disturbed environments, using appropriate technology;
- Demonstrate an understanding of some of the ways in which human activities affect the environment and how the impact of those activities is measured and monitored

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

- Assess the environmental impact of harvesting and/or extraction of resources, including ways of reducing this impact, and analyse threats to sustainability of natural resources;
- Investigate methods scientists use to classify and monitor natural resources, and conduct investigations using those methods;

- Demonstrate an understanding of the sustainable use of resources and its relationship to the biodiversity and sustainability of ecosystems.

##### Unit 3: Energy Conservation

- Evaluate initiatives and technological innovations related to energy consumption and conservation, and assess their impact;
- Investigate various methods of conserving energy and improving energy efficiency;
- Demonstrate an understanding of the basic principles of energy production, with reference to both renewable and non-renewable sources, and of various methods of energy conservation.

##### Unit 4: Human Health and the Environment

- Analyze the effects on human health of environmental contaminants and a significant environmental phenomenon;
- Investigate how different environmental factors can affect people's health and their lifestyle choices;
- Demonstrate an understanding of the ways in which environmental factors can affect human health and how their impact can be reduced.

### Student Responsibilities

#### Attendance

Regular attendance is essential for success in this course. After an absence students are expected to show the teacher a parent note on the day of their return. Please review the school's attendance/absence policy.

#### Punctuality

On-time arrival is expected as a courtesy to the rest of the class. When a student arrives late, it disrupts the class. Late arrivals will be noted. If they occur regularly, the situation will be discussed with the student and if the situation cannot be remedied, it will be discussed with a parent/guardian and possibly a school administrator.

# Bur Oak Secondary School

## Completion of Work

Level/ Grade	Achievement
Level 4 80-100%	Very high to outstanding level of achievement. Above provincial standards.
Level 3 70-79%	High level of achievement. At the provincial level.
Level 2 60-69%	Moderate level of achievement. Below, but approaching, the provincial standard
Level 1 50-59%	Passable level of achievement. Below the provincial standard
Below 50%	Insufficient achievement of curriculum expectations. Credit will not be granted.

Students are responsible for the completion of all work that is missed during an absence. Full credit will be given for this work if it is completed and shown to the teacher during the class following the student's return. It is the student's responsibility to find out what was missed, what was expected and to show the teacher the completed work. To facilitate this, each student is to have a learning partner. It will be the responsibility of the learning partner to collect any hand-outs and to help the absent student get caught up with the class.

If students miss a scheduled test they may receive a grade of zero unless they write the make-up test at the specified time. A valid excuse for the absence must be provided. There will be only one opportunity to make up a missed test. The make-up test will be written at a time arranged by the teacher. Repeated absences on scheduled test days will be investigated.

A parent note which explains an absence must be presented to the teacher upon return to class in order to write a makeup test.

## Homework

It is expected that homework will be completed regularly. It will be checked periodically and, on occasion, will be graded. If it has not been attempted it will receive a mark of zero.

## Classroom Behaviour

Behaviour appropriate to a high school class is expected, including demonstration of respect to yourself, fellow students and the teacher. Laboratory equipment must be used appropriately.

## Extra Help

Learning assistance is available. It is the student's responsibility to review work regularly and to decide when such help is needed. If specific problems cannot be solved in class, then students should make an appointment for extra help. These sessions

are only helpful if students come prepared in advance.

## Assessment and Evaluation

All work submitted in this course will be assessed and evaluated using the standards set by the Ontario Ministry of Education.

### Provincial Standards of Achievement Chart:

#### 1. Evaluation Categories

The evaluation of all achievement demonstrated in this course is based on the following ministry categories:

#### **Knowledge and Understanding.....20%**

Subject-specific content acquired in each course (knowledge), and the comprehension of its meaning and significance (understanding).

#### **Thinking and Investigation.....20%**

The use of critical and creative thinking skills and inquiry, research, and problem-solving skills and/or processes.

#### **Communication.....15%**

The conveying of meaning through various forms.

#### **Application.....15%**

Understanding connections among science, technology, society and environment.

#### **Final Summative Task.....30%**

#### 2. Determining Final Grades

Final grades will be determined using procedures consistent with the *BOSS Assessment and Evaluation Policy* as described in the BOSS Student Agenda.

*If parents have any concerns regarding their child's progress in this course they are encouraged to phone their child's teacher at school.*