



# PATTISON HIGH SCHOOL

*We don't teach a class, we teach individual students in a class*

## ELL Science / Science 9

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### Basic Information

Email: timothy.chan@pattisonhighschool.ca  
Location: Room 109  
Session: 12:35pm - 2:05pm (Short: 12:05pm - 1:20pm)  
Office Hour: 8:15am - 4:15pm

### Course Description

This course introduces students to the wonders of how different organisms reproduce, the amazing properties of chemical elements and compounds, the exciting world of electrical energy, and the life-sustaining interconnections of Earth's spheres. Each unit closely aligns to a field of scientific study – biology, chemistry, physics, and Earth science. This course offers students an opportunity to learn the material through lectures, experiments, class discussions, and projects.

### Big Ideas

- Cells are derived from cells
- The electron arrangement of atoms impacts their chemical nature
- Electric current is the flow of electric charge
- The biosphere, geosphere, hydrosphere, and atmosphere are interconnected, as matter cycles and energy flows through them

### Resources

Textbook: BC Science Connections 9 (Nelson)

## Topics

Unit	Content
1. The continuity of life depends on cells being derived from cells	Why is the reproduction of cells important? What are different ways that living things reproduce asexually? How do living things sexually reproduce? How does reproduction contribute to the variety of life on Earth?
2. The electron arrangement of atoms impacts their chemical nature	How and why do we study matter? How does the periodic table organize the elements? How can atomic theory explain patterns in the periodic table? How do elements combine to form compounds? How do we name and write formulas for compounds?
3. Electric current is the flow of electric charge	How is electrical energy part of your world? How do electrical charges behave? How do charges flow through the components of a circuit? How are circuits used in practical applications? How can electrical energy be generated and used sustainably?
4. Earth's spheres are interconnected	How do the ideas of connections and sustainability help us think about Earth's spheres? What is the role of the Sun's energy in Earth's spheres? What interactions cycle matter through Earth's spheres? How can our actions promote sustainability?

## Expectations

### Attendance

Students are expected to attend each class and notify the school if and when they have to be absent, giving a suitable reason for the absence.

Students should arrive at their classes on time and be prepared to study. They should not normally expect to leave the classroom near the beginning or end of class.

### **Clothing and Appearance**

School clothing must be evident as the outer layer while in the classroom.

Body modification, in any of its forms, may not be suitable for the school community and may require a return to an original presentation.

### **Electronic Devices**

Students must turn off their cell phones during class, and put them in their locker.

Ear buds and headphones are prohibited in the classroom, unless specifically allowed.

### **Attitude**

In order to succeed, it is important that students pay close attention in every class, attend and participate in all class activities, do all homework assignments on time, and bring materials to class such as a printed English language dictionary, a binder in which to keep notes and papers, and stationary.

### **Language**

The use of the English language at all times when in the classroom.

### **Classroom Environment**

It is important to keep the classroom clean and tidy. Other than water, no food or drink is permitted in the classroom.

### **Honesty**

Students always present work that is their own, original work - and not the result of cheating or plagiarism; the course is founded upon the trust in academic honesty.

## Evaluation

<b>Course Work</b>	<b>Percentage</b>
Homework	15%
Project	10%
Quizzes	15%
Midterm	20%
Final Exam	40%
<b>Total</b>	<b>100%</b>