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Course: Science 8
Teacher: Ms. Elixia Neumann
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Course Length: 10 months (approx. 120 hours)

Course Outline: Science 8

Course Description

The curriculum for this course is organized around these Big Ideas:

Life processes are performed at the cellular level.	The behaviour of matter can be explained by the kinetic molecular theory and atomic theory.	Energy can be transferred as both a particle and a wave.	The theory of plate tectonics is the unifying theory that explains Earth's geological processes.
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Students are expected to know the following:

- characteristics of life
- cell theory and types of cells
- photosynthesis and cellular respiration
- the relationship of micro-organisms with living things: basic functions of the immune system, vaccination and antibiotics, impacts of epidemics and pandemics on human populations
- kinetic molecular theory (KMT)
- atomic theory and models
- protons, neutrons, and quarks
- electrons and leptons
- types and effects of electromagnetic radiation
- light: properties and behaviours
- ways of sensing
- plate tectonic movement
- major geological events of local significance
- First Peoples knowledge of:
 - local geological formations
 - significant local geological events
 - layers of Earth

Course Layout

Each unit features a Learning Guide, two Inquiry Projects, and a Unit Test. This course is broken down as follows:

Unit	Topic
Preliminary Assignments	Course Outline About Me
1	Biology
2	Chemistry
3	Physics
4	Earth Science
Course Completion	Core Competency Reflection

Activation

To finalize registration in the course, students need to complete the Learning Guide for Unit 1 within 30 days of registration. Students may be removed from the course if this has not been completed in time.

Assessment

Each assignment, including the Learning Guide and the Inquiry Projects, will be marked on the proficiency scale. There is a rubric attached to each assignment.

Tests will be marked using a percentage.

Percentage	Proficiency Scale
86%+	Extending
73% - 85%	Proficient
60% - 72%	Developing
50% - 59%	Emerging
<50%	Additional Support Required and Retest

At the end of the year, students will receive a Proficiency Assessment for the course. There are no percentages or letter grades given in this course.

Proficiency	Explanation
Extending	Student has demonstrated a sophisticated understanding of the concept and competency and/or broadened learning beyond the expectations of this outcome. The work is detailed and tidy and demonstrates an exceptional understanding of the learning outcomes.
Proficient	Student has a complete understanding of the concept and competency. The work is tidy and demonstrates the strategies used to solve the problems.
Developing	Student has demonstrated a partial understanding of the concept and competencies.
Emerging	Student has demonstrated an initial understanding of the concept and competency and require additional support to demonstrate understanding.

Learning Guides and Inquiry Projects

These are the primary assignment for each unit. Students will download the Learning Guide at the start of each unit and complete it as they go through the unit. Students are expected to keep their work neat and organized, communicate their ideas as well as they can, and not skip any questions.

Before writing a unit exam, students must submit all assignments leading up to the exam. Students should be reviewing feedback from the teacher for the Learning Guide before taking the unit test.

Exam Supervision

Students may complete quizzes independently.

All exams are "closed book" and require supervision from a parent, guardian, or teacher. No additional notes or resources are to be used while taking the test.

Course Activity

Students must be working to complete learning engagements on a regular basis. Students who are inactive after two weeks will receive an email to their Brightspace email program providing a warning of inactivity. Students who are inactive after 1 month may be withdrawn from the course. If a student is planning to be inactive due to personal reasons, they need to contact their teacher to inform them of the period of inactivity.

Students should aim to complete a minimum of one unit per month to finish the course within a 10-month period.

Contacting the Teacher

Students are expected to contact the teacher when help is needed or questions arise. The best way to communicate with the teacher is through the Brightspace Email program. Students should be checking their Brightspace email program at least once a week.

Parents and Guardians can email the teacher at Elixa.Neumann@burnabyschools.ca

Resources

There are NO textbooks required for this course. Students need a basic scientific calculator.

Plagiarism

Plagiarism is unacceptable under any circumstance. Students are expected to create authentic work which demonstrates their own understanding. If students are caught cheating, plagiarizing, or submitting AI-generated responses within this course, they may be removed from the course. All sources must be cited.