

Science 9 Course Outline

General Learning Outcomes

This science course will provide each student with opportunities to:

- A) develop an understanding of the relationships amongst science, technology, society, and the environment;
- B) develop the skills and processes of science;
- C) increase his or her scientific knowledge to help develop creative, critical, and abstract thinking abilities; and,
- D) develop attitudes that support the responsible acquisition and application of both scientific and technological knowledge.

Course Outline

During this course, the following units and chapters will be covered. You may refer to pages iv - ix in your copy of BC Science 9 for the corresponding page numbers of these chapters. Please note that minor additions and/or deletions may be made during the course and that the order in which the content is presented may vary. Individual student participation in lab activities may not always be possible due to safety concerns as a result of overcrowding in Science labs.

UNIT I **ATOMS, ELEMENTS, AND COMPOUNDS**

Chapter 1 – Atomic Theory Explains the Composition and Behaviour of Matter

Chapter 2 – Elements Are the Building Blocks of Matter

Chapter 3 – Elements Combine to Form Compounds

UNIT II **REPRODUCTION**

Chapter 4 – The Nucleus Controls the Functions of Life

Chapter 5 – Mitosis is the Basis of Asexual Reproduction

Chapter 6 – Meiosis is the Basis of Sexual Reproduction

UNIT IV **CHARACTERISTICS OF ELECTRICITY**

Chapter 7 – Static Charge is Produced by Electron Transfer

Chapter 8 – Ohm's Law Describes the Relationship of Current, Voltage, and Resistance

Chapter 9 – Circuits Are Designed to Control the Transfer of Electrical Energy

UNIT V **SPACE EXPLORATION**

Chapter 10 – Scientific Evidence Suggests the Universe Formed About 13.7 Billion Years Ago

Chapter 11 – The Components of the Universe Are Separated by Unimaginably Vast Distances.

Chapter 12 – Human Understanding of Earth and the Universe Continues to Increase Through Observation and Exploration

Course Evaluation

There are two reporting periods during this course of which each has a value of 40% (2 X 40% = 80%). A final exam will also be written worth the remaining 20%. Each of the two report cards will be based upon the following criteria:

1. TESTS 50%
 - tests missed for other than what is deemed a legitimate excuse are scored as zero (e.g.- skipping).
 - all tests and quizzes are to be written in blue or black ink and/or pencil (bring your eraser!).
 - calculators are not to be shared on tests or quizzes where they are permitted.

2. LAB ACTIVITIES 50%
 - throughout the course, a number of lab activities will be completed. Some of these will involve a more detailed analysis and may be requested to be turned in for marks.
 - each student is responsible for all missed labs and may be requested to complete such an activity outside of class time (e.g.- at lunch or after school).
 - homework marks and some quizzes may also be included in this category.

Expectations

Each student is expected to show up to every class on time with all of the necessary learning materials and a positive attitude. It is recommended that daily review be done in addition to any assigned homework. Finally, it is each student's responsibility to find out what activities were missed when absent from class. Let your teacher know well in advance of any planned holidays to avoid lost marks on assignments or tests etc. **Students should be prepared to make up missed work and understand the course content on their own if travelling on family holidays.** Remember, be responsible for your own actions!

Materials Required

- HB pencils, eraser, pens, ruler, calculator, geometry set, and pencil crayons. I have read the above course guidelines and understood the requirements and expectations of this course.

STUDENT'S SIGNATURE: _____

PARENT'S/GUARDIAN'S SIGNATURE: _____