



## Science 10

### Course Outline

#### Course Overview:

Science 10 introduces main topics from Biology, Chemistry, Physics and Earth Science. This will form the basis for further studies in future grades and provide students with knowledge to find areas of interest.

#### Course Content and Suggested Timelines:

Science 10 has four main units of study:

- **Sustaining Earth's Ecosystems** (4 weeks)-

You will learn about Earth's biomes and ecosystems. Climate and climate change is discussed. How energy flows in an ecosystem, their nutrient cycles and bioaccumulation within an ecosystem will be studied. Finally, we will learn about change in ecosystems and how humans have had an effect on them. A final project of your choice will be completed.

- **Chemical Reactions and Radioactivity** (7 weeks)-

A review of the atomic theory and the different types of compounds from Science 9. In addition, you will learn about six different types of chemical reactions. Organic chemistry and radiation will also be introduced. A lab studying a color pH indicator will be performed.

- **Motion** (3 weeks)-

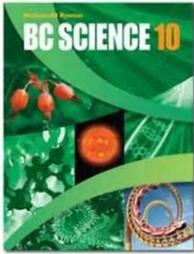
This is an introduction to Physics. In this unit you will learn about motion, velocity and acceleration.

- **Energy Transfer in Natural Systems** (4 weeks)-

In this final unit, you will discover how we can use the kinetic molecular theory to help explain climate change and plate tectonics.

#### Course Materials:

Your textbook and workbook look like this:



BC Science 10 (2008)

An e-text will be emailed to you, and a workbook will be mailed to you. The workbook is for you to keep, so go ahead and write in it!

**Data booklet:**

You will need to use this data booklet all the time! Print it off and keep it with your Science 10 stuff. The more times you use it the more familiar it will become.

**Glossaries:**

You will notice that there are glossaries for each of the four units. Please use these to help you review for the unit tests. There is a word of the day posted on the top right of the page that comes from the glossaries. Also, there are Hangman games for each unit that help you review the vocabulary for that unit.

**Other resources:**

- You will require a scientific calculator
- A printer and scanner (or a digital camera)
- A headset for use with V-class

The prescribed learning outcomes for this course are changing, here is a link to the current information available: [link to Ministry IRP](#)

**Assessment Information:**

For the Science 10 course grade, you will be evaluated in the following areas:

Introductory Unit	10% of course grade
Assessments	40% of course grade
Unit Tests	20% of course grade
Proposals/ Labs/ Projects	30% of course grade

• **Introductory Unit (10%)**

This unit consists of 4 assignments found at the beginning of Science 10. Students will become familiar with the integrity policy, course resources and complete two exercises. The exercises cover Scientific Method and graphing which will be used

throughout the course. Once these have been completed and assessed, the remainder of the course will become available.

- **Assessments: (40%)**

At the end of each section in your workbook, there is an assessment to complete. These are **not** quizzes - you can use your textbook and other resources to answer them.

- **Unit Tests: (20%)**

There are four tests to be completed, one at the end of each unit. Please note that the unit tests in Science 10 are "**closed book**" tests, which means that you are not permitted to use the textbook, workbook or any other reference resource to help answer the test questions, **except for the "data booklet" and a calculator** if needed. The test will remain hidden until you have completed all of the assessments in the unit. You do not need to complete the project first, but you are welcome to do so.

- **Labs/Projects: (30%)**

For each unit, you will need to complete **one lab or project** that is related to the unit (for a total of 4 labs in the course). For lab/ project suggestions and ideas, go to Labs/ Projects. There are also a number of suggested labs and projects throughout this website. These are a mandatory requirement to cover PLO's for Science 10.

### **Supervised and Invigilated Exams:**

The unit 1 and unit 4 tests can be supervised by a parent / guardian.

Units 2 and 3 must be supervised by an EBUS approved supervisor.

There is a map available to help you find an approved supervisor/facility:

- Follow this link and find a pre-approved EBUS invigilator: [MAP](#)

Invigilated exams need to be invigilated by an EBUS approved invigilators. Please contact your course teacher if you have questions or concerns about invigilated exams.

### **When students are not meeting the learning outcomes/ falling behind:**

When students fall behind the expected pace or plan, they will be contacted via email or phone and if there is no improvement or response, parents will also be contacted. If deemed necessary, contact with the student's home school may also occur to help determine a solution.

Students are expected to let the course teacher know when they are struggling with course content. In response, the course teacher will provide appropriate help or strategies to support learning. The course teacher will also provide feedback on

course work to support learning and help students improve. Parents will be made aware if their child is actively working but struggling to meet the learning outcomes of the course.

Students falling behind in a manner where it does not appear that they will complete the course within a year will be sent reminder emails. Without a response or renewed efforts in the course, the student may be assigned an F or withdrawn. Should they begin actively working in the course, the student may be given an alternate completion date.

### **Expectations:**

- Adhere to the EBUS Academic Integrity Policy
- Contact your teacher when help is needed
- Review feedback from assignments and tests, where applicable
- Work to complete the course in a timely manner
- Communicate respectfully
- Review weekly progress reports

### **Reporting to Parents:**

There are 4 term report cards that can be downloaded from the student dashboard. A notice will go out when these report cards are available.

Every 1-1.5 weeks that EBUS is in Session the teacher will send out a progress report showing the student's progress

### **Contacting Your Teacher:**

Your teacher will be available from 9 am to 3:30 pm during regular school hours. If you are having trouble with any concepts, please contact your teacher right away!

If you are not available during these hours contact your teacher to arrange a time outside of this.

Teacher help is communicated through email, over the phone, v-class (speaking and looking at the same interactive computer screen).

There are currently two teachers for the course; please contact the teacher of the course in which you are enrolled. You will see your teacher's contact information in the course.

Lisa Zukewich: [lzukewich@sd91.bc.ca](mailto:lzukewich@sd91.bc.ca)

Julie MacDonald: [jmacdonald@sd91.bc.ca](mailto:jmacdonald@sd91.bc.ca)