**Teacher: Bandali email:** **abandali@sd59.bc.ca**

**Room: \_\_\_\_\_\_\_ Phone:** 250-782-5585

**Text: BC Science Connections 10 Book #\_\_\_\_\_\_\_\_\_\_\_**

Welcome to Science 10! Over the next 5 months, we will explore a variety of aspects of science and the applications of science in our world. Science 10 is the intermediate science course creating the foundations for future science classes including Biology 11/12, Physics11/12, Chemistry 11/12 and Earth Science 11.

By the end of this course, you will have developed an important foundation of skills, attitudes, knowledge and respect towards the field of science.

**Course Website:** <https://learnwithmissbandali.weebly.com/>

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| **Topics:**\*1. DNA structure and function
2. patterns of inheritance
3. mechanisms for the diversity of life:
	1. mutation and its impact on evolution
	2. natural selection and artificial selection
4. applied genetics and ethical considerations
5. rearrangement of atoms in chemical reactions
6. acid-base chemistry
7. law of conservation of mass
8. energy change during chemical reactions
9. practical applications and implications of chemical processes, including First Peoples knowledge
10. nuclear energy and radiation
11. law of conservation of energy
12. potential and kinetic energy
13. transformation of energy
14. local and global impacts of energy transformations from technologies
15. formation of the universe:
	1. big bang theory
	2. components of the universe over time
16. astronomical data and collection methods

\*Important Notes:* The topics will be covered in various degrees of detail over the course
* The topics may not be covered in the order listed above.
 | **Big Ideas:**Note: these times are approximate and subject to change.Note: these times are approximate and subject to change.* DNA is the basis for the diversity of living things.
* Energy change is required as atoms rearrange in chemical processes.
* Energy is conserved, and its transformation can affect living things and the environment.
* The formation of the universe can be explained by the big bang theory.
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| **Course Evaluation:** |
| **Labs** | **35 %** |
| **Assignments** | **35%** |
| **Quizzes** | **20 %** |
| **Final Project** | **10 %** |
| **Total** | **100%** |

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Science can be a very rewarding course if you engage in it. You need to be an active member of class, involve yourself in discussions, ask questions to clarify, and extend your learning.

**Class Expectations:**

**Attendance→** Regular attendance is **key** to success in Science 10. Students are expected to be on time for class.  YOU WILL BE MARKED ABSENT FROM CLASS IF YOU ARE NOT IN CLASS.  "Late" vs. "Absent" will be decided at the teacher’s discretion.  BE ON TIME!!!  STAY IN CLASS!!! If, for whatever reason you are away, **YOU** are responsible to get any notes, handouts, and/or information missed from the front folder box, or from the website (<https://learnwithmissbandali.weebly.com/>).

**Homework & Assignments→** Although time will be given to complete most assignments in class; some assignments will require time out of the class to finish. When homework is assigned, it is due the next day at the **beginning of the class.** All work to be handed in must be **clearly labeled with name**, **date, block, subject** and **assignment information**.

**Digital Device Policy:** See Attached

**Safety→** As with any lab-based course, safety is of the utmost importance. Every student is responsible for their own safety and the safety of all others in the class. Unsafe behavior during lab time will result in an immediate zero for that lab, referral to the office and a tedious safety assignment to be completed before re-entry to the lab is permitted.

**Required Materials**: Have these with you every day, as they will not be provided.

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| * Binder with loose-leaf paper
* Duo-tang
* Graph paper
 | * Pens of various colors
* Pencils
* Ruler
* Eraser
 | * Scientific Calculator
* Well rested and inquisitive mind
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**Quizzes & Tests**

Quizzes and tests will be taken at regular intervals throughout the course. Please be on time as extra time will not be given. Please have all necessary material with you when you are scheduled to write the quiz/test.

**Extra Help**

Extra help is available after school twice a week (the schedule changes each week)

**Acknowledgement of receipt and review**

I,  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, acknowledge that I have read and understood the course outline. I also understand that the course outline may be revised or changed with or without notice.

Please sign below

Date: Student Signature:

Date: Parent/Guardian Signature:

This course outline needs to be returned by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_