**Science 10 Course Outline**

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**Course Objectives:**
- to foster and encourage the spirit of inquiry
- to develop scientific knowledge and skills
- to develop good learning, research, and study skills
- to encourage student awareness of the impact of science
**Textbook:** BC Science 10 (McGraw-Hill Ryerson)

* each student will be assigned a textbook that they are responsible for returning at the end of the course.
* the textbook will be used as a reference tool, other sources of info will be notes/videos/handouts in class as well as activities/labs.

**Topics Covered:** Topics may not be covered in this particular order. Some chapters and curriculum units are subject to change as the course progresses & some may be covered in greater depth than others.

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| --- | --- |
| **Category** | **Topic** |
| **Introduction** | Lab Safety |
| **Science Skills** | Scientific MethodScientific literacyCritical thinkingCommunicationEthical, responsible, and cooperative behaviour |
| **Life Science** | DNA structure and functiongenes and chromosomessimple patterns of inheritance mechanisms for the diversity of life: * mutation and its impact on evolution
* natural and artificial selection

applications of genetics and ethical considerations  |
| **Chemical Science** | How atoms rearrangechemical reactions acid-base chemistrylaw of conservation of massenergy change during chemical reactionspractical applications and implications of chemical processes, including First Peoples perspectives |
| **Physical Science** | Law of conservation of energy transformation of potential and kinetic energy local and global impacts of energy transformations from technologiesnuclear energy and radiation* fission versus fusion
* technologies and applications and implications

First Nations perspectives on energy |
| **Earth Science** | formation of the universe:* big bang theory
* components of the universe over time
* astronomical data and collection methods
 |

Note: this science course may provide students with the opportunity to perform laboratory dissections involving preserved specimens. Students have the choice to opt out of such activities, but they may be required to complete an alternative learning activity (virtual lab, watch a video, or other task). Although the science teachers want to emphasize the value of hands-on experience, we respect the right for students to choose and they will not be penalized for choosing an alternative study.

**General Expectations:**

**Please come prepared.** It is expected that students will come to class with:

* **pen/pencil**
* **3 ring binder** with **paper** and **dividers**
* **agenda** to record homework and test dates
* **textbook**
* a **calculator** will be needed further along in the course

The student binder should be kept organized and in chronological order to help you study. Each unit will begin with a divider. ALL materials are to be kept until the end of the year. Your binder should be neat and tidy as it may be collected and evaluated.

**Please arrive on time**. If you are late, you will require a late slip from the office.

* **All absences require a note for the teacher, or email from the parent/guardian**
* When the student returns from an absence, it is the **student’s responsibility** to find out what was missed and get caught up before next class. This includes class assignments and exams.
* Class notes and homework will posted on line at <http://www.wilsonswebpage.com>

**Missed Tests**

* If you miss a test due to a legitimate absence, you must bring a note from your parent/guardian, administrator or counselor. Student must attend a scheduled test session in order to write a make-up test.
* If a student does not provide a note for an absence, that absence is considered ‘unexcused’ and there will be no opportunities for the student to make up missed work, including tests.
* If you know you will be **absent on a test day**, let the teacher know **in advance** and provide a note signed by a parent/guardian regarding your absence.
* Missed labs can usually not be made up. If you missed the lab due to an excused absence, you will be excused from the practical part of the lab. Students will still be expected to complete any pre-and post-lab assignments or quizzes.

**Hand in all lab reports and assignments on time.**

* All work is due at the **START** of class unless otherwise stated
* **Late assignments will lose 10% per day.**
* Late assignments may be accepted without penalty only when a student has a legitimate reason for missing a deadline, with a note from your parent/guardian.
* No lab reports or assignments will be accepted once marked work is returned. The student may be able to show their learning through a conversation.
* Late assignments will negatively affect the student’s work habit grade and consistently late work will result in a phone call home

**Do your own work**. Please review the school policy on cheating and plagiarizing.

* Collaborating with peers on homework is expected but written work must be in your own words. Copying another student’s work on a lab report or assignment, will result in both receiving a mark of zero on that assignment.
* Cheating on an exam will result in a mark of zero on that exam, an appointment with the vice-principle, a phone call home, and a note in your permanent record.
* Plagiarizing and copying large portions of text without acknowledging the source will result in a mark of zero for that assignment.

**Electronic Devices in the classroom**

Cell phone use during instructional time is not permitted. Students caught using a device during instruction may have it confiscated until the end of class. Phones are not permitted as calculators during tests.

**Extra Help**

It is the student’s responsibility to ask for help or clarification when a topic is not understood. Raise your hand in class or arrange at time to meet with me after class.

**Evaluations**

Students will be evaluated on both work effort and output.

Assignments and Labs 30%

Projects, Quizzes and Tests 70%

To the right is the breakdown of how your mark will be distributed:

**GRADES:**

The Science 10 final grade will be based on three terms.

**Letter Grades Work Habits**

A 86-100% G: Good
B 73 – 85% S: Satisfactory
C+ 67 – 72% N: Needs Improvement
C 60 – 66%
C- 50 - 59%
I 0 – 49%

 \* “I” means that no credit is given for the course until the mark is raised

**“I” Reports**

* An “I” will be given to students receiving less than 50% or to students in danger of receiving less than 50% at point close to the end of term
* Students receiving an “I” must complete and submit missing assignments before the end of term during the weekly Wednesday afterschool sessions and/or write a term test.
* If the student does not submit the work or does not come to the make-up sessions or does not pass the test, their mark will remain as is. If the student complete the missing assignments and/or passes the test, their grade will convert to 50%.
* Students are permitted one “I” during the semester. If a student receives less than 50% in another term, they will be assigned an “F” for that particular term.

**Classroom Procedures:**

1. **Lates**
	* Enter quietly, immediately go to your seat and start working
	* Recurring lates will negatively affect your work habits mark and will involve communication with parents, counsellor, and administrators
2. **Keeping the classroom tidy**
	* Use the appropriate waste containers for garbage and recycling
	* Put all materials away when you have finished with them
	* Eating is not permitted in class without teacher permission
	* Writing on desks, chairs, dividers, etc is considered destruction of school property. Students will be held accountable for all damages and are responsible for the repair costs.
3. **Washroom**
	* Please ask before your leave the room (the teacher needs to know where each student is in the case of an emergency such as an earthquake or fire)
	* Use only at the appropriate times (example: during individual seat work)
	* Only one person is permitted to leave the room at a time
	* Be quick, I expect you to be honest with your time
4. **Assignments**
	* Hand in assignments at the START of class to the INBOX tray
	* Late assignments should be submitted directly to the teacher
	* It is the students responsibility to collect missed assignments or to make up missed work

**Student Instructions:**
 (1) *Please review the Science 10 Course outline with your parent.*

(2) *Please sign the form below and ask your parent to the sign the form and fill in their email address below.*

 (3) *Bring the completed form back to your teacher.*

Dear Parents/Guardians,

Most of the information outlined in this package is important for you to be aware of as well as your child

Please take time to read over this outline with your child and feel free to contact me with any questions or concerns.

I am looking forward to a fun and exciting year of Science 10 ahead!

Sincerely,

Tammy Wilson

Tammy.wilson@sd41.bc.ca

Student’s Name: (print) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_

Student’s Signature: (sign) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian Name: (print) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent /Guardian Signature (sign) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent /Guardian preferred contact phone number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian email address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_