Mr. Wilkison

Science 10 - Course Outline

Science 10 is a continuation of the fundamental principles and ideas used in science. This program concentrates on a practical application of scientific ideas and skills in everyday technology and life. Success in this course is dependent on effort and participation in all classroom activities. For more information on careers and requirements please visit http://www.careertrekbc.ca/

Course Content

- Unit 1 - Safety and Procedures
- Unit 2 – Biology Chapters 1-3
- Unit 3 – Physics Chapters 8,9
- Unit 4 – Chemistry Chapters 4-7
- Unit 5 - Earth Science Chapters 10-12

Course Outcomes:

Applications of Science (Integrated throughout all of the units)

It is expected that students will:

- demonstrate safe procedures
- perform experiments using the scientific method
- represent and interpret information in graphic form
- demonstrate scientific literacy
- demonstrate ethical, responsible, cooperative behavior
- describe the relationship between scientific principles and technology
- demonstrate competence in the use of technologies specific to investigative procedures and research

Biology (Sustainability of Ecosystems)

It is expected that students will:

- explain the interaction of abiotic and biotic factors within an ecosystem
- assess the potential impacts of bioaccumulation
- explain various ways in which natural populations are altered or kept in equilibrium

Physics (Motion)

It is expected that students will:

- explain the relationship of displacement and time interval to velocity for objects in uniform motion
- demonstrate the relationship between velocity, time interval, and acceleration

Chemistry (Chemical Reactions and Radioactivity)

It is expected that students will:

- differentiate between atoms, ions, and molecules using knowledge of their structure and components
- classify substances as acids, bases, or salts, based on their characteristics, name, and formula
- distinguish between organic and inorganic compounds
- analyze chemical reactions, including reference to conservation of mass and rate of reaction
- explain radioactivity using modern atomic theory

Earth Science (Energy Transfer in Natural Systems and Plate Tectonics)

It is expected that students will:

- explain the characteristics and sources of thermal energy
- explain the effects of thermal energy within the atmosphere
- evaluate possible causes of climate change and its impact on natural systems
- analyze the processes and features associated with plate tectonics
- demonstrate knowledge of evidence that supports plate tectonic theory

Course Evaluation

Course Standing:

A $= 86 - 100\%$

B $= 73 - 85\%$

C+ $= 67 - 72\%$

C $= 60 - 66\%$

C- $= 50 - 59\%$

I/F $= 0 - 49\%$

Overall Mark

Course Mark – 80%

Provincial Exam – 20%

Work Effort: G, S, N

A subjective evaluation made by your teacher based on attentiveness, punctuality, positive and enthusiastic attitude, **homework/lab completion** and effective use of classroom time.

Class Procedures

- All homework will be due within **1 minute** of class commencing unless stated otherwise.
- Assignments are either "on time", "late" (after deadline but before class discussion), or "very late" (after the class discussion – 25% penalty).

- Fire drill - Students are to proceed to our assembly area and find me for attendance. Failure to do so will result in an F for that term, as essential safety procedures will have been violated.

- Lockdown - In the event of this drill, students are to close the blinds and proceed quietly to the printer area.

Classroom Rules and Behavior

1.) Respect

All rules in the classroom are based on the concept of **RESPECT** - respecting each other, the classroom equipment, the school or differing viewpoints. Therefore, before you do something, ask yourself if the action you are about to do takes into account the feelings and rights of others and whether the action is going to interfere with the learning of another person or your own learning. If it is going to have a negative effect on learning, then DON'T DO IT! For example,

a) Being quiet while Mr. Wilkison or another student is speaking demonstrates respect for what they have to say.

b) Putting your hand up to answer demonstrates respect for other students and yourself and self-control.

c) Being quiet during work period demonstrates respect for other students' learning and allows you to concentrate and learn better

d) Coming in quietly to class and getting books open and ready demonstrates maturity and a readiness to get on with your most important learning.

e) Absolutely no cell phones or any music devices. These devices are distracting and not conducive to a learning atmosphere. Do not even bring them to class!

2.) Attendance

Being in class on time and regularly is a must for success. If you are late to class come in quickly and sit down quietly. **If an absence does occur, it is the responsibility of the student to get caught up. The best method to do this is to check Mr. Wilkison's website or have a partner from the class in which the student can receive notes and information on what is expected for next class**. If the partner is unreachable, the student may ask the teacher about missed assignments or handouts on the morning of their return. ***Not, the next time the class occurs!*** It is also the responsibility of the student to bring a signed note, by the guardian, to class explaining why the absence was a **legitimate absence*** upon their return.

* **A legitimate absence <u>does not</u> include reasons like I was babysitting late and slept in, I was busy with a soccer practice and couldn't finish, or I couldn't study/do my homework because we went away for the weekend.**
* **A legitimate absence <u>does</u> include reasons of legitimate illness and bereavement.**

3.) Equipment

<u>You are responsible for bringing the following items to class every day</u>.

- Loose-leaf binder with paper
- Your textbook
- Scientific calculator
- Pencil/eraser (for graphs and math problems)
- Ruler

4.) Homework

Homework will be marked by myself. This is composed of small daily assignments of questions related to the concepts being learned.

5.) Labs – 30% of term mark

Laboratory work is a crucial part of this course and is to be done in partners unless otherwise stated. Both students should be actively participating in all aspects of the lab (preparation, experiment, and clean up). It is expected that partners discuss and help each other in the lab. This does not mean your answers will be written the same, only that the ideas or concepts of the answer could be the same! **<u>The lab is to be prepared individually unless stated otherwise by your teacher</u>**.

6.) Quizzes and Exams – 70% of term mark

Missed quizzes and exams will be written as soon as the student returns from a **legitimate absence**. Legitimate absence means that the guardian has provided a signed note explaining the *VALID absence. Absences without a valid note will void all chances of a make-up exam. Once the exam has been handed back the test is no longer valid for writing.

For Parents

Please keep this form

- All marks are posted and updated daily at http:// . Please check this regularly for up-to-date marks throughout the course.

- All missing assignments will be posted on Mr. Wilkison's website. Please check regularly to help monitor your son or daughter. The address for the website is

www.calebwilkison.weebly.com

- Mr. Wilkison can be reached by e-mailing him using the following address. All e-mails will be answered within two school days.

Caleb.Wilkison@sd23.bc.ca

For Students

Return this form signed and completed please

Student Name - _____ Block - _____

I have read and understood this course outline for Science 10. I will make every effort to do my best work in class and at home. I will ask for help when I need it.

Signed - _____ Date - _____

Parent/Guardian Signature - _____ Date - _____

Guardian e-mail - _____ Student e-mail - _____