

Science 10 - Course Information & Expectations



Teacher: Ms. C. Miller

Room B211

Textbook: BC Science 10

Welcome to Science 10! This is the last general science course you will take before choosing specific branches in science. The purpose of the course is to further explore the world in which we live in order to understand it and gain an appreciation for it. During the course we will be studying the following topics:

COURSE OVERVIEW

BIOLOGY – Sustainability of Ecosystems

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| <ul style="list-style-type: none"> ● Abiotic vs Biotic Factors ● Nutrient Cycles <ul style="list-style-type: none"> - carbon, nitrogen & phosphorous ● Ecosystems <ul style="list-style-type: none"> - characteristics - comparing different systems ● Bioaccumulation <ul style="list-style-type: none"> - mechanisms | <ul style="list-style-type: none"> - impact ● Energy transfer in Ecosystems <ul style="list-style-type: none"> - food webs, food pyramids ● Traditional Ecological Knowledge (TEK) ● Ecosystem Disruption <ul style="list-style-type: none"> - natural phenomena, foreign species, pollution, habitat destruction, exploitation of resources |
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CHEMISTRY – Changes in Matter

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| <ul style="list-style-type: none"> ● Laboratory Safety & Procedures ● Atoms, Ions, & Molecules <ul style="list-style-type: none"> - arrangement of protons, electrons & neutrons - models of electron arrangement - chemical families, periods, and their properties - the structure of the atom ● Chemical Bonds <ul style="list-style-type: none"> - chemical compounds - ionic vs. covalent bonds | <ul style="list-style-type: none"> - acids, bases, salts - organic vs inorganic compounds ● Chemical Reactions <ul style="list-style-type: none"> - types of reactions - balancing reactions ● Nomenclature |
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PHYSICS – Motion & Radioactivity

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| <ul style="list-style-type: none"> ● Displacement <ul style="list-style-type: none"> - relationship to velocity - scalars vs vectors ● Motion of Objects ● Uniform Motion ● Acceleration <ul style="list-style-type: none"> - positive, negative and zero acceleration - calculations | <ul style="list-style-type: none"> - acceleration due to gravity ● Nuclear Energy <ul style="list-style-type: none"> - isotopes - radioactive decay - fission vs. fusion - nuclear equations |
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EARTH SCIENCE

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| <ul style="list-style-type: none"> ● Heat & Thermal Energy <ul style="list-style-type: none"> - convection and conduction & radiation ● Energy & the Atmosphere <ul style="list-style-type: none"> - absorption and radiation - energy and wind formation - air density & pressure ● Climate | <ul style="list-style-type: none"> - human & natural influences - affects on natural systems ● Continental Drift Theory ● Plate Tectonics <ul style="list-style-type: none"> - mechanisms - types of boundaries - processes and formations |
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EVALUATION

Your grade will be based upon the following weighting policy:

IN-CLASS MARK	Skill Builders	Science Application Skills – graphing, experimental design, lab skills	Final Grade: IN-CLASS MARK: 80% PROVINCIAL EXAM: 20%	
	Life Sciences	Sustainability of Ecosystems		
	Physical Sciences	Chemistry		
		Motion		
	Radioactivity			
Earth Science	Energy Transfer in Natural Systems			

CLASSROOM EXPECTATIONS AND PROCEDURES

In order for learning to occur, we all need to be in a safe and productive environment. I have some expectations of behaviour and habits in order for us all to be successful.

- **DO ASSIGNMENTS**

All assignments are due at the beginning of class. If an assignment is already marked and handed back to the class, then you must do an alternative assignment (usually a much harder and longer one) to receive credit. Assignments should be neat and legible, and answered in full sentence answers or it will not be marked. (PLEASE NOTE: you will not have your textbook to study from at the end of the semester) I will mark work that is late but it MUST be accompanied by a completed "Late Assignment Form".



- **BE IN CLASS**

This course moves at a fast pace, and attendance problems may cause you to experience difficulty with course material. If you miss a class, make certain you obtain notes from a reliable peer and obtain handouts from the assignment folder upon your return. **IT IS YOUR RESPONSIBILITY** to catch up on missed material.

If you miss a test or quiz due to an unexpected absence, you will be an INCOMPLETE. To be considered for a re-write you must bring a note from your parent/guardian on the day of your return to class. **BE PREPARED TO WRITE THE TEST ON THE DAY OF YOUR RETURN!** If it is not convenient for ME, than we will reschedule. If you do not rewrite a test right away, you may be given an alternative test at my discretion.

- **ARRIVE TO CLASS ON TIME**

Late students miss important information, disturb others and interrupt the teacher. You are late if:

- a) you are not in the class when the bell rings
- b) you are not in your seat when the bell rings
- c) you put your books on your desk, leave the room and are not back in your seat when the bell rings

When you arrive to class, the expectation is that you start working on the "**Bell Activity**" by the time the bell rings.

Procedure if you are late: Get your books and materials out **BEFORE YOU COME INTO CLASS** so you do not make a disturbance. If the door is open, please come in and I will talk to you when it is convenient. If the door is closed, please knock once and I will open it when it is convenient.

*****Students who are late will receive an automatic detention. Subsequent lates will result in a phone call home and referrals.**

- **BE PREPARED FOR CLASS**

You must bring all required supplies to every class. You will need the following supplies:

- three ring binder with dividers and lined paper
- pencil, blue/black pen, eraser, red pen, ruler
- textbook
- agenda
- calculator (not used every class, but still handy to have

- **BE RESPECTFUL OF OTHERS**

It is **absolutely required** that you will be considerate of others and act in a responsible manner. Be respectful and kind to your classmates, both in word and action. This includes:

- Being a good listener (peers, teacher, PA announcements)
- Not using vulgar or offensive language
- Keeping hands, feet, objects to yourself

Please.....

- Do not pack up until I say you may. Remember I dismiss you, NOT the bell.
- No food or gum in the classroom. Water is permitted, but please make sure all containers get put in the garbage or this privilege will be taken away. No drinks will be allowed in the lab.
- No iPods, MP3 players, discmans, pagers, or cell phones in the classroom.

IF YOU CHOOSE TO NOT LIVE UP THESE EXPECTATIONS, THERE ARE CONSEQUENCES.....

If you are fulfilling these expectations, the following will occur:

- 1ST TIME: = conference with me after school
- 2ND TIME: = 15 minutes after school & phone call home
- 3RD TIME: = 30 minutes after school & phone call home/ possible referral

any missed time afterschool = double the time owed