

Science 9

Course Outline

2023-2024

Welcome to Science 9!

The goal of this course is to help you build & connect your understanding of science in the context of your daily life. We will be exploring topics related to chemistry, physics, biology, and earth sciences. I'm looking forward to sharing the school year with you!

The course is divided into the following units:

Unit 0.5 – Safety & Scientific Method	<ul style="list-style-type: none">• Lab equipment and safety• WHMIS symbols• Following the scientific method; identifying variables and controls
Unit 1 – Chemistry	<i>The electron arrangement of atoms impacts their chemical nature</i>
	<ul style="list-style-type: none">• Element properties as organized in the periodic table• The arrangement of electrons determines the compounds formed by elements• Naming and formula writing for ionic and covalent compounds
Unit 2 – Biology	<i>Cells are derived from cells</i>
	<ul style="list-style-type: none">• Asexual reproduction: mitosis, different forms• Sexual reproduction: meiosis, human sexual reproduction
Unit 3 – Earth Science	<i>The biosphere, geosphere, hydrosphere, and atmosphere are interconnected, as matter cycles and energy flows through them</i>
	<ul style="list-style-type: none">• Matter cycles within biotic and abiotic components of ecosystems• Sustainability of systems• First Peoples knowledge of interconnectedness and sustainability
Unit 4 – Physics	<i>Electric current is the flow of electric charge</i>
	<ul style="list-style-type: none">• Circuits – must be complete for electrons to flow• Series and parallel circuits• Voltage, current, and resistance• Ohm's Law Effects of solar radiation on the cycling of matter and energy

Required Materials: Please bring the following to every class

- Binder with 5 dividers for each unit
- Calculator (Chemistry & Physics)
- Pencil, eraser, highlighters, ruler
- Ongoing study guide for the unit

Ms. Wang

Room 204

Email: cwang@deltalearns.ca

Website: <http://mswangscience.weebly.com>

Evaluation:

Your overall grade for this course is cumulative and based on a Proficiency Scale:

Incomplete (I)	Emerging (EMG)	Developing (DEV)	Proficient (PRF)	Extending (EXT)
Does not yet meet the basic criteria or provide evidence of learning for the assignment. <u>Work needs to be re-submitted</u> once it is re-done or corrected	<i>"I can do this with help"</i> Demonstrates an <u>initial understanding</u> of the learning	<i>"I can do this, but I need some assurances or confirmation"</i> Demonstrates a <u>partial understanding</u> of the learning	<i>"I can do this independently"</i> Work shows a <u>complete understanding</u> of the learning	<i>"I can teach this to others"</i> Work that demonstrates a <u>sophisticated understanding</u> , expands on the assigned outcomes and applies learning beyond the requirements of the assignment

Performance Standards for Work Habits (G/S/N)

	Good	Satisfactory	Needs Improvement
Attendance	No unexcused absences	Some unexcused absences	Unexcused absences
Punctuality	On time to every class	One or two late arrivals	Frequently late to class and/or late by several minutes
Preparation	Always brings necessary materials to class	Occasionally has forgotten materials	Frequently does not bring materials
Work Ethic	Gets to work quickly; remains on task	Works well as directed and generally remains on task	Slow to get started, must be supervised constantly and closely or goes off task
Attitude	Shows interest in the class; offers constructive ideas	Is generally accepting of class work and displays a positive attitude	Often brings a negative attitude to class; complains and/or goes off task
Participation	Frequently offers productive ideas; works to support the activity in class	Takes part in activities; responds when called upon	Avoids taking part in class activities; rarely contributes to class or contributes negatively
Homework	Work is always completed; excellent quality is produced; evidence of home study for exams	Complete work most of the time to an acceptable quality; some evidence of home study for exams	Frequently incomplete, showing minimal effort; rare evidence of home study for exams
Responsibility	Often shows initiative; accepts feedback willingly and takes responsibility to improve; always present for due dates, scheduled presentations, and tests	Occasionally shows initiative; responds appropriately to feedback and makes corrections as directed; some absenteeism for due dates, scheduled presentations, and tests	Rarely shows initiative; responds poorly to feedback; avoids doing remedial work; frequently absent for due dates, scheduled presentations, and tests

Class Expectations

Class Conduct

Considerate, polite, and respectful behaviour is expected at all times towards the other students, teacher, and learning environment. You are **ALL** responsible for each other's behaviour and learning!

Attendance

Please be respectful of your classmates and teachers by arriving to class on time. If tardiness becomes habitual, your guardians will be notified and/or you will be sent to administration.

Regular attendance is essential to success in a science course. Being in class allows you to follow the flow of the lesson and sequentially build your skills. When absent, it is **your** responsibility to find out what you missed.

If you are absent:

- Look up the notes, practice, and keys on <http://mswangscience.weebly.com>
 - Ask a classmate
 - Ask the teacher
Flex (Room 204)
- Email: cwang@deltalearns.ca

Assignment Policy

One of the most important things you can do to maximize your chances of success is to develop good work habits. You will have homework most nights, but the course is designed so that a significant portion of your work can be completed in class. **It is expected that you will make the most of the time you are given.**

Please respect all given due dates. This course covers a lot of material and builds skills sequentially. While I will accept late assignments, any assignment submitted after the due date will affect your **work habits** mark.

Opportunities to improve your mark on an assignment will only be provided if the work was completed and submitted on time. All corrections must be done under the supervision of the teacher and completed during Flex within **one week** of the assignment being returned.

Test Policy

If you know of an upcoming absence, it is **your** responsibility to notify the teacher and arrange an alternative day to complete the quiz/test. It is always preferable to complete the quiz/test **prior** to your absence; if that is not possible, it will be made up the day of the student's return to school during Flex or at the teacher's discretion.

All quizzes are considered formative and can be omitted if the test score of the same unit is higher.

Personal Technology

Cell phones, music players and other electronic devices should be turned off and **placed in the phone holder** if brought to class. If you require an electronic device for an activity, you will be informed in advance. Students who do not follow these guidelines will be asked to surrender their device for the remainder of the class or day, at the discretion of the teacher.

Personal technology will be collected during quizzes and tests.

Academic Integrity

Plagiarism or cheating will not be tolerated. Students who submit plagiarized work will receive a mark of zero, their guardians will be contacted, and they will be referred to administration. Plagiarism and cheating will result in the inability to rewrite an assignment.

Communication

Extra help is always available. Should you require or wish to have further explanations, a meeting during Flex can be arranged. ***Please self-advocate!!***

If you have any questions or concerns, please see me in Room 204 or email me at cwang@deltalearns.ca

By signing below, this indicates that both student and parent/guardian have read, understood, and agree to the expectations outlined above for the school year:

Student's Signature: _____ Date: _____

Parent/Guardian's Signature: _____ Date: _____