



Address: 8580 16th Ave, Burnaby, BC, V3N 1S6
Telephone: (604) 296-6940
Fax: (604) 296-6941
Toll Free: 1-888-479-8882

Website: <https://online.burnabyschools.ca/>
Information online.info@burnabyschools.ca
Registration register.online@burnabyschools.ca

Course: Science 10
Teacher: Mr. Francis Tsen
Email: francis.tsen@burnabyschools.ca
Phone: 604 760-1686

Course Length: 10 months
 (approx 120 hours)

Course Curriculum

The curriculum for this course is organized around these Big Ideas:

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.

Students are expected to know the following:

- **DNA structure and function**
- **patterns of inheritance**
- mechanisms for the diversity of life:
 - **mutation** and its impact on evolution
 - **natural selection** and **artificial selection**
- **applied genetics** and **ethical considerations**
- rearrangement of atoms in **chemical reactions**
- acid-base chemistry
- law of conservation of mass
- **energy change** during chemical reactions
- **practical applications and implications of chemical processes**, including First Peoples knowledge
- **nuclear energy** and **radiation**
- law of conservation of energy
- **potential** and **kinetic** energy
- **transformation of energy**
- local and global **impacts of energy transformations** from technologies
- formation of the universe:
 - big bang theory
 - **components of the universe over time**
- **astronomical data and collection methods**

Mark Weighing

Category	Weighing
Learning Guide	25%
Unit Projects	35%
Unit Tests	40%

Resources

- Textbook not required.
- Scientific calculator required

Course Content

Completion of one project or learning guide will activate a student.

Units	Formative Assessment	Summative Assessment
1: Biology	1 Unit Assignment 2 projects	1 Exam
2 Chemistry	1 Unit Assignment 2 Project	1 Exam
3: Earth Science	1 Unit Assignment 2 Project	1 Exam
4: Physics	1 Unit Assignment 2 Project	1 Exam

Students are expected to:

- contact the teacher by instant messaging, email or phone when help is needed or questions arise
- be actively engaged and submitting work on a regular basis
- inform the teacher when they will be inactive for two or more weeks.
- be aware that if they are inactive in a course for four or more weeks they may be removed from that course
- check their email at least twice a week
- create and submit completed solutions for all activities in the unit/chapter before requesting a test.
- cite all sources properly
- answer in their own words
- check that their work and tests have been marked.
- make time available to come in to Burnaby Online to write tests.
- make appointments to write tests at least 2 school days in advance.