



Science 10 Course Outline Fall 2025

Instructor: Ms. Carpio

Email: donnalyn.carpio@pattisonhighschool.ca

Course Description: Science 10 is a foundational science course that introduces students to key concepts in biology, chemistry, physics, and astronomy. Students will investigate the role of DNA in inheritance and evolution, explore chemical reactions and their practical applications, examine energy transformations and their environmental impacts, and learn about the origin and structure of the universe. Through inquiry-based learning and real-world connections, students will develop scientific literacy, critical thinking skills, and an understanding of how science influences society and everyday life.

Big Ideas:

Unit 1: DNA	DNA structure and function; pattern of inheritance; mutation; natural and artificial selection; applied genetics and ethical considerations.
Unit 2 – Chemical Processes	Chemical reactions; acid-base chemistry; law of conservation of mass; energy change; practical applications and implications of chemical processes.
Unit 3 – Energy	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.
Unit 4 – Universe	Formation of universe; and astronomical data.

Course Materials:

Students must bring a notebook, pens, pencils, and a Science 10 workbook.

Class Participation:

Daily engagement and participation are encouraged, as they will be graded using a rubric.

Attendance Policy:

Students are expected to arrive at class on time and ready to engage. If you are absent from the class, please check on Teams for any notes or handouts you missed. You must make up assignments in a timely manner in order to receive full credit.

Honesty Policy:

Work will be assessed for authenticity. Dishonesty will result in consequences, including '0' marks or no credit.

Technology Policy:

All technology, including cell phones, will be used at the discretion of the teacher.

<u>Grading:</u>	Coursework	Value
	Participation	5%
	Exit Ticket	5%
	Quizzes	20%
	Worksheets and Labs	20%
	Projects/Presentations	10%
	Unit Tests	20%
	Final Exam	20%
	Total	100%

** Be on time; stay on-task; organize materials; join class and group discussions; contribute to group work.*