

School of Business and Education- Department of Academic Upgrading

COURSE OUTLINE – Winter 2026

CH0120 (A3): Chemistry Grade 11 Equivalent – 5 (4-0-2) 90 Hours for 15 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR:	Tara Lee Whittaker	PHONE:	TBA
OFFICE:	C405	E-MAIL:	TWhittaker@nwpolytech.ca
OFFICE HOURS:	TBA		

CALENDAR DESCRIPTION:

Major concepts include: inorganic nomenclature; modern atomic structure, orbitals; ionic and covalent bonding, hydrogen bonding, metallic bonding, Van der Waal forces, ionization, electronegativity, VSEPR; solutions, stoichiometry, empirical formulas, percent composition, pH, molarity, equilibrium, Arrhenius acids and bases.

PREREQUISITE(S)/ COREQUISITE(S):

SC0110 (Science 10); MA0110 (Math 10C) or MA0120 placement. A student may register in BI0130 if the student has achieved a mark of 60% or better in Alberta Education Biology 20 within the previous four years or consent of the instructor.

REQUIRED MATERIALS:

Nelson Chemistry (Alberta 20–30) (Recommended)
Chemistry Data Booklet (can be printed from myClass)
Lab coat (can be purchased from the NWP Bookstore)
Graph Paper (fine lined 10 lines/cm-may be printed from myClass).

DELIVERY MODE(S):

Classroom instruction and lab. Use of D2L required.



LEARNING OUTCOMES:

Students will:

Unit A: The Diversity of Matter and Chemical Bonding

- describe the role of modelling, evidence and theory in explaining and understanding the

structure, chemical bonding and properties of ionic compounds

- describe the role of modelling, evidence and theory in explaining and understanding the

structure, chemical bonding and properties of molecular compounds.

Unit B: Quantitative Relationships in Chemical Changes:

- explain how balanced chemical equations indicate the quantitative relationships between

reactants and products involved in chemical changes.

- use stoichiometry in quantitative analysis

Unit C: Forms of Matter: Gases

- explain molecular behaviour, using models of the gaseous state of matter.

Unit D: Matter as Solutions, Acids and Bases

- investigate solutions, describing their physical and chemical properties

- describe acidic and basic solutions qualitatively and quantitatively

TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check the transferability of this course at the Alberta Transfer Guide main page [Transfer Alberta](#)

**** For courses with alpha (letter) grading, a grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability.**

EVALUATIONS:

Unit Tests (equally weighted)40%

Labs15%

Assignments, Quizzes 15%

Final Exam (Cumulative)..... 30%

GRADING CRITERIA

Please note that most institutions will not accept your course for transfer credit **IF** your grade is **less than C-**.

Alpha Grade	4-point Equivalent	Percentage Guidelines	Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	95-100	C+	2.3	67-69
A	4.0	85-94	C	2.0	63-66
A-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
B	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

A Course Schedule is provided on myClass. Please print it off and keep a copy to refer to as it will contain a day-by-day breakdown of the topics we will be covering each day, the readings in the textbook, workbook questions, lab schedule, due dates and exam dates that you will be held to, whether or not those dates are referred to during class time.

STUDENT RESPONSIBILITIES:

Refer to the NWP Policy on Student Rights and Responsibilities at

<https://www.nwpolytech.ca/about/administration/policies/fetch.php?ID=69>

If you are late for a lab, you might not be permitted to do the lab as important safety concerns are always addressed at the beginning of each lab period. The lab is certified as a Level 2 biohazard facility and the regulations that apply will be given to you during your first lab. If you miss a lab, you will not have the opportunity for a make-up lab. You automatically receive a grade of 0 for that lab.

STATEMENT ON ACADEMIC MISCONDUCT:

Academic Misconduct will not be tolerated. For a more precise definition of academic misconduct and its consequences, refer to the Student Rights and Responsibilities policy available: [Student Rights and Responsibility Policy](#)

**Note: all Academic and Administrative policies are available on the same page.

[Policies Directory | Northwestern Polytechnic](#)

Additional Information:

Tests and Exams: Use of any electronic communication devices during Tests and Exams is not permitted.