

# Nelson Mandela High School

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### **Chemistry 30**

### **Teacher Contact Information:**

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Over the course of the 2023-2024 school year, Nelson Mandela High School teachers will maintain an online course presence containing materials, resources, assignments and supports through our D2L environment. It is important for students to take an active role in their learning and stay current in their schoolwork if away for any reason.

#### **Course Description:**

The secondary science program is guided by the vision that all students, regardless of gender or cultural background, are given the opportunity to develop scientific literacy. The goal of scientific literacy is to develop in students the science-related knowledge, skills and attitudes that they need to solve problems and make decisions and, at the same time, to help students become lifelong learners who maintain their sense of wonder about the world around them. Diverse learning experiences within the science program provide students with opportunities to explore, analyze and appreciate the interrelationships among science, technology, society and the environment and to develop understandings that will affect their personal lives, their careers and their futures.

For a more detailed list of curricular outcomes, please see the Chemistry 30 Program of Studies.

#### **Assessment:**

The final mark for Chemistry 30 is a weighted average of your class mark (80%) and the mark you achieve on the **Chemistry 30 Diploma Exam (20%)**. Your class mark will be calculated from evidence of your understanding of course outcomes and scientific skills as outlined below.

Your class mark will be calculated from evidence of your understanding of course outcomes and scientific skills using the scale below. For more detailed information please the <a href="CBE High">CBE High</a>
School Proficiency Scale.

### **Chemistry 30 Skills Outcomes:**

Outcome	Outcome Description
SK1 Initializing and Planning	Ask questions about observed relationships, and plan investigations of questions, ideas, problems and issues.
SK2 Performance and Recording of Data	Conduct investigations into relationships between and among observable variables, and use a broad range of tools and techniques to gather and record data and information.
SK3 Analysis and Interpretation of Data	Analyze data and apply mathematical and conceptual models to develop and assess possible solutions

## **Chemistry 30 Outcomes:**

Unit Name	Outcome	Description of Outcome
Thermochemistry	A1	Determine and interpret energy changes in chemical reactions.
	A2	Explain and communicate energy changes in chemical reactions.
Redox	B1	Explain the nature of oxidation-reduction reactions.
	B2	Apply the principles of oxidation-reduction to electrochemical cells.
Organics	C1	Explore organic compounds as a common form of matter.
	C2	Describe chemical reactions of organic compounds.
Equilibrium Acid/Base	D1	Explain that there is a balance of opposing reactions in chemical equilibrium systems.
	D2	Determine quantitative relationships in simple equilibrium systems.

### **Course Materials and Resources:**

Binder with loose-leaf paper, pens, pencils, erasers, ruler, scientific calculator (graphing calculator is useful but not required).

# **Key Links:**

- NMHS Code of Conduct
- Digital Citizenship
- Academic Integrity
- Assessment Rules
- Understanding the High School Proficiency Scale