



Cairine Wilson Secondary School

Course Outline

Chemistry

SCH3U (11)

University Preparation

Prerequisite: Science, Grade 10, Academic

Description: This course enables students to deepen their understanding of chemistry through the study of the properties of chemicals and chemical bonds; chemical reactions and quantitative relationships in those reactions; solutions and solubility; and atmospheric chemistry and the behaviour of gases. Students will further develop their analytical skills and investigate the qualitative and quantitative properties of matter, as well as the impact of some common chemical reactions on society and the environment.

Overall Expectations:

- A1. demonstrate scientific investigation skills (related to both inquiry and research) in the four areas of skills (initiating and planning, performing and recording, analysing and interpreting, and communicating);
- A2. identify and describe careers related to the fields of science under study, and describe the contributions of scientists, including Canadians, to those fields.
- B1. analyse the properties of commonly used chemical substances and their effects on human health and the environment, and propose ways to lessen their impact;
- B2. investigate physical and chemical properties of elements and compounds, and use various methods to visually represent them;
- B3. demonstrate an understanding of periodic trends in the periodic table and how elements combine to form chemical bonds.
- C1. analyse chemical reactions used in a variety of applications, and assess their impact on society and the environment;
- C2. investigate different types of chemical reactions;
- C3. demonstrate an understanding of the different types of chemical reactions.
- D1. analyse processes in the home, the workplace, and the environmental sector that use chemical quantities and calculations, and assess the importance of quantitative accuracy in industrial chemical processes;
- D2. investigate quantitative relationships in chemical reactions, and solve related problems;
- D3. demonstrate an understanding of the mole concept and its significance to the quantitative analysis of chemical reactions.
- E1. analyse the origins and effects of water pollution, and a variety of economic, social, and environmental issues related to drinking water;
- E2. investigate qualitative and quantitative properties of solutions, and solve related problems;
- E3. demonstrate an understanding of qualitative and quantitative properties of solutions.
- F1. analyse the cumulative effects of human activities and technologies on air quality, and describe some Canadian initiatives to reduce air pollution, including ways to reduce their own carbon footprint;
- F2. investigate gas laws that explain the behaviour of gases, and solve related problems;
- F3. demonstrate an understanding of the laws that explain the behaviour of gases.

Knowledge = 25%

Application = 20%

Inquiry = 15%

Communication = 10%

Summative = 10%

Final Exam = 20%

Resources:

Chemistry 11 - replacement cost \$ 80.00

Learning Skills: The separate evaluation and reporting of the learning skills in the following five areas reflects their critical role in students' achievement of the curriculum expectations. Students will be assessed continually on the following learning skills:

Works Independently	Teamwork	Organization	Work Habits/Homework	Initiative	Self-Regulation
accepts responsibility for completing tasks, follows instructions, completes assignments on time and with care, uses time effectively	works willingly and cooperatively with others, is sensitive to the needs of others, takes responsibility in sharing the work, shows respect for others ideas and opinions	organizes work, creates a plan to complete tasks, demonstrates ability to organize and manage information	puts forth consistent effort, completes homework on time and with care, uses time effectively, perseveres with complex tasks that require effort	responds to challenges and takes risks, seeks out opportunities for learning, identifies problems to solve, seeks additional information	sets own individual goals and monitors progress towards achieving them

Assessment and Evaluation Policy	
Insufficient Evident	Response
Late, Missed or Skipped Tasks (Parents are reminded to contact the school for all absences)	<ul style="list-style-type: none"> The student will be consulted regarding the reason The parent/guardian will be contacted A second due date will be negotiated. If the task is not submitted according to the negotiated second due date deductions of 10% per day up to and including "0" may be awarded in consultation with the School Success team which may include Department Head, Administration, and Guidance. Students who miss assessment tasks have presented zero evidence of learning. Based on the professional judgment of the teacher, students may be required to complete the assignment in order to meet the overall expectations of the curriculum. A final mark of "1" or "insufficient evidence" is acceptable for grade 9 and 10 course
Academic Integrity	<ul style="list-style-type: none"> Fraudulent work is of no value and provides zero evident of learning. Intentional academic fraud is a disciplinary issue and will incur consequences which may include suspension and mark reduction. Teachers will take into account mitigating circumstances when dealing with academic fraud. Students will be given an additional opportunity to demonstrate achievement when in the teacher's professional judgment there is not sufficient evidence that the student has met overall course expectations. Fraudulent material will be documented and archived. The parent/guardian will be contacted. Students who commit intentional academic fraud will forfeit the possibility of winning subject awards. All students in grade 9 will be required to attend academic integrity workshops at the beginning of each school year.

Extra Help: *The staff of CW is committed to the success of all students.* Students are strongly encouraged to seek extra help from the teacher both in and out of the classroom. The Green room is available after school Tuesday, Wednesday and Thursday.

Communication: Please feel free to contact me at the school 613-824-4411, if you have any questions or concerns. My Voicemail extension is 509 and my email address is john.bonnell@ocdsb.ca