

Sir John A. Macdonald Collegiate Institute Course Brief 2020-2021

Course Name	CHEMISTRY – GRADE 11 UNIVERSITY	Grade	11
Course Code	SCH 3U1/3	Credit Value	1
Pre-Requisite	SNC 2D1/2D3	Or Recommended Pre-Requisite	
Type of Course	UNIVERSITY		

Course 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.

Curriculum Strands

Matter, Chemical Trends, and Chemical Bonding

- analyse the properties of commonly used chemical substances and their effects on human health and the environment, and propose ways to lessen their impact;
- investigate physical and chemical properties of elements and compounds, and use various methods to visually represent them;
- demonstrate an understanding of periodic trends in the periodic table and how elements combine to form chemical bonds.

Chemical Reactions

- analyse chemical reactions used in a variety of applications, and assess their impact on society and the environment;
- investigate different types of chemical reactions;
- demonstrate an understanding of the different types of chemical reactions.

Quantities in Chemical Reactions

- 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;
- investigate quantitative relationships in chemical reactions, and solve related problems;
- demonstrate an understanding of the mole concept and its significance to the quantitative analysis of chemical reactions.

Solutions and Solubility

- analyse the origins and effects of water pollution, and a variety of economic, social, and environmental issues related to drinking water;
- investigate qualitative and quantitative properties of solutions, and solve related problems;
- demonstrate an understanding of qualitative and quantitative properties of solutions.

Gases and Atmospheric Chemistry

- 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;
- investigate gas laws that explain the behaviour of gases, and solve related problems;
- demonstrate an understanding of the laws that explain the behaviour of gases.

Assessment and Evaluation of Student Achievement

Unit	Unit Title/Description	Evaluation Task	Achievement Chart Focus
Unit 1	Matter, Chemical Trends, and Chemical Bonding	- Atomic/Periodicity Quiz - Graphical Analysis of Periodic Trends - Metal Lab - Unit 1 Test	K T, C A, C K, A, T
Unit 2	Chemical Reactions	- Balancing/Reactions Quiz - Double Displacement Lab - Unit 2 Test	K A, C K, A, T
Unit 3	Quantities in Chemical Reactions	- Mole Quiz - Chemical Formula of an Unknown Hydrate Lab - Unit 3 Test	K A, C K, A, T
Unit 4	Solutions and Solubility	- Solution Quiz - Acid Base Titration Lab (Formal Lab) - Unit 4 Test	K A, C K, A, T
Unit 5	Gas and Atmospheric Chemistry	- Graphical Analysis of the Gas Laws - Teacher's Choice	T, C K, A
Culminating		Percent Yield Lab	K, T, C, A

Levels of Achievement

For Grades 9 to 12, a student's achievement of the overall curriculum expectations will be evaluated in accordance with the achievement charts in the provincial curriculum and will be reported using percentage marks.

Achievement Level	Percentage Mark Range	Achievement Description
HL4/L4+ L4 LL4/L4-	95 – 100 87 – 94 80 – 86	Level 4 identifies achievement that surpasses the provincial standard. The student demonstrates the specified knowledge and skills with a high degree of effectiveness.
HL3/L3+ L3 LL3/L3-	77 – 79 73 – 76 70 – 72	Level 3 represents the provincial standard for achievement. The student demonstrates the specified knowledge and skills with considerable effectiveness. Parents of students achieving at level 3 can be confident that their children will be prepared for work in subsequent grades/courses
HL2/L2+ L2 LL2/L2-	67 – 69 63 – 66 60 – 62	Level 2 represents achievement that approaches the provincial standard. The student demonstrates the specified knowledge and skills with some effectiveness. Students performing at this level need to work on identified learning gaps to ensure future success.
HL1/L1+ L1 LL1/L1-	57 – 59 53 – 56 50 – 52	Level 1 represents achievement that falls much below the provincial standard. The student demonstrates the specified knowledge and skills with limited effectiveness. Students must work at significantly improving learning in specific areas, as necessary, if they are to be successful in the next grade/course

Students who achieve below 50% have not met curriculum expectations; a credit will not be granted.

Learning Skills	Assessment of Learning Skills
Responsibility Organization Independent Work Collaboration Initiative Self-Regulation	Excellent (E) Good (G) Satisfactory (S) Needs Improvement (N)

Weighting by Strands/Categories			
Knowledge and Understanding	34%	Communication	22%
Thinking	22%	Application	22%

Assessment and Evaluation Strategies: the following is a list of potential A/E strategies used within the course; the list may not be exhaustive and is subject to change

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|----------------------------------|--------------------------------------|
| → Paper & pencil quizzes & tests | → Library/Internet research projects |
| → Formal examination | → Formal lab reports |
| → Practical lab performance | → Scientific illustration |
| → Written assignment/projects | → Graphical analysis & presentation |
| → Research presentations | → Portfolio assessment |

CALCULATION OF FINAL MARK

- 70% for evaluations conducted throughout the course
- 10% for a Culminating Activity – the CA will occur in last weeks of the course - CA Lab-10%
- 20% Final Exam

Important Information

Academic Honesty: Cheating and Plagiarism

- Students are expected to submit only their own original work on evaluations done in class or out of class. Cases of academic dishonesty (cheating and/or plagiarism) will be dealt with on a case-by-case basis, but each case will involve an investigation, communication with the student and a mark of zero for the plagiarized work. Whether the student has an opportunity to demonstrate his/her learning in another assignment will be at the discretion of the teacher and/or Principal.
- Students may be required to submit their assignments through Brightspace to facilitate academic honesty in students in addition to submitting a hard copy.

Missed and Late Evaluations:

- Absenteeism for major evaluations (unit tests, presentations) must be excused with documentation and/or a medical note. Make-up of missed work will be done at the teacher's convenience.
- Late assignments may be subject to a penalty of **-1 mark per day**.
- A zero will be given once assignments are handed back and marked
- There will be **no make-up tests after the test date set**. Students may ask to write the test earlier if they know in advance that they will be away.

Attendance:

- Be here everyday and on time! You should be in class promptly at the first bell. If you are ill your parents must call (416) 396-6793 and leave a message. If you need to stay home, watch the recorded lesson which can be found in BrightSpace.

Class Conduct

- Listen to the lesson and take notes. If you have a question, raise your hand. Be respectful of everyone in the classroom (live and synchronous).
- This year will be very different from any other, please ask for help when you need it.
- You are expected to bring your notes prior to class. No notes will be printed to avoid contact.

Education of Exceptional Students

- To meet the needs of exceptional students, teachers will provide instructional (e.g. changes in teaching strategy or use of assistive technology), environmental (e.g. preferential seating or headphones), and assessment (e.g. additional time for tests and assignments or oral responses to test questions) accommodations as set out in a student's Individual Education Plan.

Classroom Website

- We will be using Brightspace
- I will try to stream and/or record each In Class day and to record each Synchronous day In Google Meet, in case of absence or a student needs to stay home due to the Board protocols.
- I will be using the following link for ALL Google Meets: **SCH3U1au**

Resources for Success

- **Printed notes.**
- **A three-ringed binder** with paper to organize notes and handouts.
- **Pens, pencils, calculator and highlighter(s)** to take notes, highlight key information in handouts, and create visual representations (e.g. charts, diagrams, etc.) of key concepts or ideas in order to help better comprehend the course material.
- **An agenda (or digital organizational tool)** to record due dates for assignments, projects and tests and to set up a time to meet with the teacher for extra help.
- **Review notes daily and always be aware of deadlines**

Contact

Email: Hannah.lau@tdsb.on.ca

Room: 223

Google Meet Code: SCH3U1au

Help Session: After Class Daily