|  |  | **Course Outline and Evaluation Summary**  **Course Code** | |  |
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|  | Title of Course: Grade 12 College Preparation Chemistry SCH4C1 | 416-395-3210 | |
|  | Department: Science |  | |

| **Course Description** |
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| This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment. Students will use a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment. |

| **Course Evaluation**  Course evaluations incorporate one or more of the achievement categories (KICA). A brief description of each category can be found [here](https://www.dcp.edu.gov.on.ca/en/assessment-evaluation/categories-of-knowledge-and-skills). The final grade is calculated using the weighted percentages below. | | | | | |
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| **Term Work:** | **A variety of tasks where you show your learning and have marks assigned using the Achievement Categories/Strands** | | **Summative**  **Evaluation:** | **Marked summative tasks which assess your learning on the entire course** | |
| 70% | 20 % | Knowledge & Understanding | 30% | 15% | Summative project |
| 25 % | Thinking & Inquiry |
| 10 % | Application | 15% | Final Exam |
| 15 % | Communication |

| **Learning Skills** |
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| Learning skills provide Information to help students understand what skills, habits & behaviors are needed to work on to be successful. These are not connected with any numerical mark. A brief description of each skill can be found [here](http://www.edu.gov.on.ca/eng/policyfunding/growsuccess.pdf#page=17).  **Responsibility, Organization, Independent Work, Collaboration, Initiative and Self-Regulation**  E – Excellent G – Good S – Satisfactory N – Needs Improvement |

| **Required Materials:** Any educational resource required for this course will be provided by the school. It is the student’s responsibility to come to class with these materials. |
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| **School/Departmental/Classroom Expectations** |
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| **Attendance:** The student is expected to attend class on time. Parents/guardians will be contacted if lates/attendance becomes an issue/hindrance. If the student knows about an absence in advance, they should contact the teacher.  **Plagiarism/Cheating:** A mark of 0 will be assigned for any work submitted that does not belong to the student. A mark of 0 will be assigned to a student who was found to have cheated. Parents/guardians will be informed.  **Missed Work:** If a student is absent from class, (e.g. illness, sports team) it is **their** responsibility to find out what they have missed and to catch up. The student is responsible for completing all of the work that was missed due to an absence. If a student misses an assignment or test without a legitimate explanation and documentation, marks up to and including the full value of the evaluation may be deducted. Make-up tests must be arranged to be written.  **Late Work:** Late work may result in a deduction of marks up to and including the full value of the evaluation. |

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| **Course Assessment Tasks** | | | |
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| ***Unit/Topic/Strand*** | ***Big Ideas*** | ***Major Assignments / Evaluations*** | ***Estimated Duration*** |
| **Unit 1 - Matter and Qualitative Analysis** | * The properties of matter can be predicted and analysed qualitatively. * Substances can be identified based on their distinct properties. * Qualitative analysis of matter is used in many different fields of endeavour. | Assignments  quizzes  tests | 24 hours |
| **Unit 2 - Organic Chemistry Organic** | * Compounds have predictable chemical and physical properties determined by their respective structures. * Organic compounds can be synthesized by living things or through artificial processes. * Organic chemical reactions and their applications have significant implications for society, human health, and the environment. | Assignments  quizzes  tests | 24 hours |
| **Unit 4 - Chemical Calculations** | * Relationships in chemical reactions can be described quantitatively. * Quantitative relationships of chemical reactions have applications in the home, workplace, and the environment. | Assignments  quizzes  tests | 24 hours |
| **Unit 5 - Chemistry in the Environment** | * Air and water quality can be affected by both natural processes and human activities. * Quantitative relationships of chemical reactions can be used to assess air and water quality | Assignments  quizzes  tests | 24 hours |
| **Unit 3 - Electrochemistry** | * Oxidation and reduction are paired chemical reactions in which electrons are transferred from one substance to another in a predictable way. * The control and applications of oxidation and reduction reactions have significant implications for society and the environment. | Assignments  quizzes  tests | 6  hours |
| Culminating Task(s) | Summative Project | Exam | 6 hours |