

# SOUTH CARLETON HIGH SCHOOL

## Ottawa-Carleton District School Board

### COURSE OUTLINE

#### SCH3U - GRADE 11 University Prep Chemistry

Credit Value: 1 credit

Hours: 110

Prerequisite: SNC2D

#### Expectations

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 in these reactions; solutions and solubility, atmospheric chemistry and the behavior of gasses. 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.

#### Big Ideas

Unit Title	Chemistry Focus For Learning Expectations
Matter, Chemical Trends and Chemical Reactions and Bonding	<ul style="list-style-type: none"><li>• Every element has predictable physical properties determined by its structure.</li><li>• The type of chemical bond in a compound determines the physical and chemical properties of that compound.</li><li>• It is important to use chemicals properly to minimize the risks to human health and the environment.</li><li>• Chemical reactions and their applications have significant implications for society and the environment.</li></ul>
Quantities in Chemical Reactions	<ul style="list-style-type: none"><li>• Relationships in chemical reactions can be described quantitatively.</li><li>• The efficiency of chemical reactions can be determined and optimized by applying an understanding of quantitative relationships in such reactions.</li></ul>
Solutions and Solubility	<ul style="list-style-type: none"><li>• Properties of solutions can be described qualitatively and quantitatively and can be predicted.</li><li>• Living things depend for their survival on the unique physical and chemical properties of water.</li><li>• People have a responsibility to protect the integrity of Earth's water resources.</li></ul>
Gases and Atmospheric Chemistry	<ul style="list-style-type: none"><li>• Properties of gases can be described qualitatively and quantitatively and can be predicted.</li><li>• Air quality can be affected by human activities and technology.</li><li>• People have a responsibility to protect the integrity of Earth's atmosphere.</li></ul>

\*NOTES: a. Specific learning expectations are available for each unit of study. b. The sequence of topics may not be exactly as listed above.

#### Accommodations for Exceptional Students

The Science department makes every effort to accommodate the identified needs of exceptional (IPRC'd) students and will attempt to differentiate curriculum delivery methods, student modes of expression, and assessment methods as recommended by the student's individual education plan (IEP).

#### Career Planning

The Science department makes every effort to ensure that students are aware of career opportunities related to various fields of science under study, and describe the contributions of scientists, including Canadians, to those fields.

#### Technology

The school will supply all laboratory resources and materials.

#### Evaluation

Term Evaluations (70%)	Summative Evaluation (30%)
Students will be evaluated according to the overall expectations of the Ontario curriculum. <i>Assessment tools include both summative and formative tasks including but not limited to; tests/quizzes, assignments, projects, lab reports, skill based performance tasks and rich assessment tasks</i>	<i>The exam will occur during the exam period in Jan/Jun and will evaluate the whole semester's work. All students must be present.</i>

More information on South Carleton High School's policy on Assessment and Evaluation, on Academic Integrity, on punctuality, absenteeism and examinations can be accessed on our school website.