



Ontario eSecondary School Course Outline 2026-2027

Ministry of Education Course Title: Chemistry, University Preparation	
Ministry Course Code: SCH4U	
Course Type: University Preparation	
Grade: 12	
Credit Value: 1.0	
Prerequisite(s): SCH3U, Grade 11, University Preparation	
Department: Science	
Course developed by: Sara McKormic	Date: August 1, 2019 Revised: August 1, 2026
Length: One Semester	Hours: 110
This course has been developed based on the following Ministry documents: 1. <i>Science, The Ontario Curriculum, Grades 11 and 12, 2008, (revised)</i> 2. <i>Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools (2010)</i> 3. <i>Learning for All (2013)</i>	

COURSE DESCRIPTION/RATIONALE

This course enables students to deepen their understanding of chemistry through the study of organic chemistry, the structure and properties of matter, energy changes and rates of reaction, equilibrium in chemical systems, and electrochemistry. Students will further develop their problem-solving and investigation skills as they investigate chemical processes, and will refine their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in everyday life and on evaluating the impact of chemical technology on the environment.

OVERALL CURRICULUM EXPECTATIONS

Scientific Investigation Skills and Career Exploration

By the end of the course, students will:

- 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)

Structure and Properties of Matter

By the end of this course, students will:

- assess the benefits to society and evaluate the environmental impact of products and technologies that apply principles related to the structure and properties of matter
- investigate the molecular shapes and physical properties of various types of matter
- demonstrate an understanding of atomic structure and chemical bonding, and how they relate to the physical properties of ionic, molecular, covalent network, and metallic substances.

Organic Chemistry

By the end of this course, students will:

- assess the social and environmental impact of organic compounds used in everyday life, and propose a course of action to reduce the use of compounds that are harmful to human health and the environment;
- investigate organic compounds and organic chemical reactions, and use various methods to represent the compounds;
- demonstrate an understanding of the structure, properties, and chemical behaviour of compounds within each class of organic compounds.

Energy Changes and Rates of Reaction

By the end of this course, students will:

- analyse technologies and chemical processes that are based on energy changes, and evaluate them in terms of their efficiency and their effects on the environment;
- investigate and analyse energy changes and rates of reaction in physical and chemical processes, and solve related problems;
- demonstrate an understanding of energy changes and rates of reaction.

Chemical Systems and Equilibrium

By the end of this course, students will:

- analyse chemical equilibrium processes, and assess their impact on biological, biochemical, and technological systems;
- investigate the qualitative and quantitative nature of chemical systems at equilibrium, and solve related problems;
- demonstrate an understanding of the concept of dynamic equilibrium and the variables that cause shifts in the equilibrium of chemical systems.

Electrochemistry

By the end of this course, students will:

- analyse technologies and processes relating to electrochemistry, and their implications for society, health and safety, and the environment;
- investigate oxidation-reduction reactions using a galvanic cell, and analyse electrochemical reactions in qualitative and quantitative terms;
- demonstrate an understanding of the principles of oxidation-reduction reactions and the many practical applications of electrochemistry.

COURSE CONTENT

<i>Unit</i>	<i>Length</i>
Unit 1: Structure and Properties of Matter	30 hours
Unit 2: Organic Chemistry	23 hours
Unit 3: Energy Changes and Rates of Reaction	22.5 hours
Unit 4: Chemical Systems and Equilibrium	20.5 hours
Unit 5: Electrochemistry	14 hours
Final Exam	2 Hours
Total	110 hours

UNIT DESCRIPTIONS

UNIT 1: STRUCTURE AND PROPERTIES OF MATTER

In this unit, students will investigate the molecular shapes and physical properties of various types of matter. Students will also demonstrate an understanding of atomic structure and chemical bonding, and how they relate to the physical properties of ionic, molecular, covalent network, and metallic substances. Lastly, students will assess the benefits to society and evaluate the environmental impact of products and technologies that apply principles related to the structure and properties of matter.

UNIT 2: ORGANIC CHEMISTRY

In this unit, students will investigate organic compounds and organic chemical reactions, and use various methods to represent the compound and will demonstrate an understanding of the structure, properties, and chemical behaviour of compounds within each class of organic compounds. Lastly, students will assess the social and environmental impact of organic compounds used in everyday life, and propose a course of action to reduce the use of compounds that are harmful to human health and the environment.

UNIT 3: ENERGY CHANGES AND RATES OF REACTIONS

In this unit, students will investigate and analyse energy changes and rates of reaction in physical and chemical processes, and solve related problems. Students will also demonstrate an understanding of energy changes and rates of reaction. Lastly, students will analyse technologies and chemical processes that are based on energy changes, and evaluate them in terms of their efficiency and their effects on the environment.

UNIT 4: CHEMICAL SYSTEMS AND EQUILIBRIUM

In this unit, students will investigate the qualitative and quantitative nature of chemical systems at equilibrium, and solve related problems. Students will demonstrate an understanding of the concept of dynamic equilibrium and the variables that cause shifts in the equilibrium of chemical systems. Lastly, students will analyse chemical equilibrium processes, and assess their impact on biological, biochemical, and technological systems.

UNIT 5: ELECTROCHEMISTRY

In this unit, students will investigate oxidation-reduction reactions using a galvanic cell, and analyse electrochemical reactions in qualitative and quantitative terms. Students will also demonstrate an understanding of the principles of oxidation-reduction reactions and the many practical applications of electrochemistry. Lastly, students will analyse technologies and processes relating to electrochemistry, and their implications for society, health and safety, and the environment.

TEACHING AND LEARNING STRATEGIES

In this course, students will experience the following activities.

Participation activities are seven standardized, course-wide prompts (Teach the Teacher, Concept in Action, Spot the Error, Concept Connections, Take a Position, Claim/Support/Question, and a culminating Course Takeaways video) embedded at set points throughout the course. They build metacognitive engagement with unit concepts and contribute to the course's participation grade.

Presentations with embedded videos are utilized to outline concepts, explain theory with the use of examples and practice questions, and incorporate multi-media opportunities for students to learn more (e.g. online simulations, quizzes, etc.).

End of unit conversations are opportunities for students to express their ideas, problem solving, and thought processes with a teacher who provides timely feedback.

Reflection is an opportunity for students to look back at concepts and theories with new eyes, to relate theory to practice, and to align learning with their own values and beliefs.

Discussions with the instructor are facilitated through video conferencing, discussing the concepts and skills being studied. This enables two-way communication between the student and the instructor, to share ideas and ask questions in dialogue. This also helps to build a relationship between the student and instructor.

Instructor demonstrations (research skills, etc.) are opportunities for the instructor to lead a student through a concept or skill through video conferencing, videos, or emailing with the student.

Discussion forums are an opportunity for students to summarize and share their ideas and perspectives with their peers, which deepens understanding through expression. It also provides an opportunity for peer-to-peer feedback.

Practical extension and application of knowledge are integrated throughout the course. The goal is to help students make connections between what they learn in the classroom and how they understand and relate to the world around them and their own lives. Learning becomes a dynamic opportunity for students to be more aware that their learning is all around them and enable them to create more meaning in their lives.

Individual activities/assignments assessments are completed individually at a student's own pace and are intended to expand and consolidate the learning in each lesson. Individual activities allow the teacher to accommodate interests and needs and to assess the progress of individual students. For this reason, students are encouraged to discuss IEPs (Individual Education Plans) with their teacher and to ask to modify assessments if they have a unique interest that they feel could be pursued in the assessment. The teacher plays an important role in supporting these activities by providing ongoing feedback to students, both orally and in writing.

Research is an opportunity to apply inquiry skills to a practical problem or question. Students perform research to gather information, evaluate quality sources, analyze findings, evaluate their analysis, and synthesize their findings into conclusions. Throughout, students apply both creative thinking and critical thinking. New questions are also developed to further learning.

Writing as a learning tool helps students to think critically about course material while grasping, organizing, and integrating prior knowledge with new concepts. Good communication skills are important both in and out of the classroom.

Virtual simulations are interactive websites that provide students with an opportunity to ask questions, explore hypotheses, relate variables, examine relationships, and make connections between theory and application in a safe environment that promotes intellectual risk taking and curiosity.

Virtual labs are interactive websites that provide students with an opportunity to follow a procedure to test hypotheses using scientific apparatus, gather and record observations, analyze observations using formula and relevant theory/concepts, and then formulate conclusions that relate hypotheses to analysis.

Diagrams are visual representations of scientific ideas and concepts. They provide another perspective to organize ideas. Visuals are thought to promote cognitive plasticity - meaning, they can help us change our minds or help us to remember an idea.

Graphics/images are visual representations of ideas/concepts. Visuals are thought to promote cognitive plasticity - meaning, they can help us change our minds or help us to remember an idea.

Charts are visual representations of scientific ideas and concepts using math that support analysis. For example, you can have a pie chart that shows Canada's energy sources.

Tables involve organizing information in terms of categories (rows and columns). This helps us to understand the relationships between ideas and data, as well as highlight trends.

Drawings and schematics are scientific and engineering ideas explained visually. For example, an electric circuit can be explained using symbols, which makes it possible to communicate ideas universally, clearly, and succinctly.

Articles are examples of concepts and theories being discussed in the public realm and with respect to current events. They are snapshots not only of why scientific theories/concepts/applications are relevant but also provide a window into the broader context of scientific knowledge and understanding. Students learn through reading and analysis that science is deeply related to, and intertwined with, society and the diverse perspectives of lived experience.

Practice problems provide students with a scenario/problem to solve by applying concepts and skills learned in a context. This helps students to understand the relevance of their learning.

ASSESSMENT, EVALUATION, AND REPORTING

Assessment: The process of gathering information that accurately reflects how well a student is achieving the identified curriculum expectations. Teachers provide students with descriptive feedback that guides their efforts towards improved performance. These assessments are not for marks.

- In assessment for learning (AFL), teachers provide students with descriptive feedback and coaching for improvement.

- In assessment as learning (AAL), teachers help students develop their capacity to be independent, autonomous learners who are able to set individual goals, monitor their own progress, determine next steps, and reflect on their thinking and learning.

Evaluation: Assessment of Learning (AOL) focuses on evaluation which is the process of making a judgement about the quality of student work on the basis of established criteria over a limited, reasonable period of time.

Reporting: Involves communicating student achievement of the curriculum expectations and Learning Skills and Work Habits in the form of marks and comments as determined by the teacher's use of professional judgement.

Assessment & Evaluation at OES: Triangulation of Learning

In alignment with the Ontario Ministry of Education's *Growing Success* policy, student achievement across all high school courses at Ontario eSecondary School (OES) is evaluated through the **triangulation of evidence: observations, conversations, and student products**.

OES courses incorporate each of these evidence sources in a variety of ways to provide every student with equitable opportunities to demonstrate their learning:

- **Observations:** Collected through video recordings, interactive digital tools, learning logs, and synchronous task demonstrations.
- **Conversations:** Gathered via teacher-student conferences, oral defenses, virtual check-ins, and reflective feedback dialogues.
- **Products:** Demonstrated through major projects, essays, lab reports, performance tasks, and final assessments.

By evaluating a balanced variety of evidence, OES teachers apply professional judgment to ensure accurate, fair, and comprehensive assessment of each student's progress.

STRATEGIES FOR ASSESSMENT

Assessment practices can nurture students' sense of progress and competency and information instruction. Many diagnostic tools, e.g. checklists and inventories, are used at regular intervals throughout the units to encourage students' understanding of their current status as learners and to provide frequent and timely reviews of their progress.

Units conclude with unit tests and performance tasks (student designed inquiry projects and lab reports). Teachers are encouraged to share goals with students early in the course and to connect Unit learning experiences frequently and explicitly with big ideas, overall expectations, and performance tasks. The teacher could also involve students in the discussion, modification, or creation of rubrics, and teach students to use rubrics as a learning tool that can support the writing process and practice.

ASSESSMENT ACTIVITIES

- ☐ You Try! Self-check problems
- ☐ Homework assignments
- ☐ Individual conference meetings
- ☐ Diagnostic quizzes
- ☐ Oral presentations (conferences)
- ☐ Research projects (STSE focused)

- ☐ Inquiry Projects
- ☐ Tests & Exam

EVALUATION

The final grade will be determined as follows:

- ☐ 65% of the grade will be based on evaluation conducted throughout the course. This portion of the grade should reflect the student's most consistent level of achievement throughout the course, although special consideration will be given to more recent evidence of achievement.
- ☐ 25% of the grade will be based on a final evaluation administered at the end of the course. This evaluation will be based on a final written examination, comprehensive of the course. The final evaluation is an opportunity for the student to demonstrate comprehensive achievement of the overall expectations for the course.
- ☐ 10% of the grade will be based on the student's attendance and participation throughout the course, assessed according to Ministry criteria.

(*Growing Success: Assessment, Evaluation and Reporting in Ontario Schools*. Ontario Ministry of Education Publication, 2010 p.41)



TERM WORK EVALUATIONS (65%)

Evaluation Item	Description	Category	Weight
Unit 1 STSE Project	Research-based projects for each unit based on applications of learned concept/law to real life problems	T,C	13
Unit 1 Lab Investigation	Labs are used to evaluate students' thinking and communication skills in relation to the scientific process	T, C	
Unit 1 Test	Tests evaluate unit concepts in a timed and proctored environment.	K,A	
Unit 2 STSE Project	Research-based projects for each unit based on	T,C	

	applications of learned concept/law to real life problems		13
Unit 2 Lab Investigation	Labs are used to evaluate students' thinking and communication skills in relation to the scientific process	T, C	
Unit 2 Test	Tests evaluate unit concepts in a timed and proctored environment.	K,A	
Unit 2 End of Unit Conference (Units 1 and 2)	Live interviews are used to evaluate students through observation and conversation.	K, T, C, A	
Unit 3 STSE Project	Research-based projects for each unit based on applications of learned concept/law to real life problems	T,C	13
Unit 3 Reaction Rate Assignment	Problem sets supplement lessons and are used to assess whether or not students are meeting criteria for success	K, T, C, A	
Unit 3 Lab Investigation	Labs are used to evaluate students' thinking and communication skills in relation to the scientific process	T, C	
Unit 3 Test	Tests evaluate unit concepts in a timed and proctored environment.	K,A	
Unit 4 STSE Project	Research-based projects for each unit based on applications of learned concept/law to real life problems	T,C	13
Unit 4 Lab Investigation	Labs are used to evaluate students' thinking and communication skills in relation to the scientific process	T, C	
Unit 4 Test	Tests evaluate unit concepts in a timed and proctored environment.	K,A	
Unit 5 STSE Project	Research-based projects for each unit based on applications of learned concept/law to real life problems	T,C	13
Unit 5 Lab Investigation	Labs are used to evaluate students' thinking and communication skills in relation to the scientific process	T, C	
Unit 5 Test	Tests evaluate unit concepts in a timed and proctored environment.	K,A	
End of Unit Response (Units 3-5)	Live interviews are used to evaluate students through observation and conversation.	K, T, C, A	

FINAL EVALUATIONS (25%)

Evaluation Item	Description	Category	Weight
Final Exam	A final, written examination, covering all curriculum expectations for the course.	K, T, C, A	25

ATTENDANCE AND PARTICIPATION (10%)

Evaluation Item	Description	Category	Weight
Attendance	Assessed according to the Ministry's attendance criteria (Growing Success, September 2026 update), based on the proportion of unexcused absences over the course.	N/A	5
Participation	Assessed according to the Ministry's participation criteria (Growing Success, September 2026 update), based on engagement in class discussions and activities throughout the course, including the standardized participation prompts (see Teaching and Learning Strategies).	N/A	5

AAL/AFL/AOL TRACKING SHEET

Unit 1 Structure and Properties of Matter

AAL	AFL	AOL
Energy Level Diagrams and Electron Configuration Problem Set	Atomic Theory Timeline	Unit 1 STSE Project
Light as a Wave Problem Set	Gizmos Activity – Photoelectric Effect	Unit 1 Lab Investigation
Schrodinger's Cat Analogy	Periodic Table Reflection	Unit 1 Test
Matter Waves Problem Set	Atomic Theory Quiz	
Quantum Numbers Problem Set	Intermolecular Forces Assessment	
Atomic Theory Practice Quiz	Experimental Design Practice Lab Report	
Lewis Structures Problem Set	Types of Solids Dry Lab	
VSEPR Theory Problem Set		
Molecular Polarity Problem Set		
Bonds, Forces and Properties Problem Set		
Unit 1 Review		

Unit 2 Organic Chemistry

AAL	AFL	AOL
Naming Alkanes Worksheet	Benzene and Cancer Recording	Unit 2 STSE Project: Observation
Alkene Alkyne Problem Set	Famous Aldehydes/Ketones	Unit 2 Lab Investigation
Cyclic HC and Aromatics Problem Set	Organic Compounds – Comparing Properties & Dry Lab	Unit 2 Test
Alcohol and Ethers Problem Set	Gizmos – Dehydration and Hydrolysis Assessment	
Aldehydes and Ketones Problem Set		
Carboxylic Acids and Esters Problem Set		
Amines and Amides Problem Set		
Organic Nomenclature Quiz		

Organic Reactions Problem Set		
Unit 2 Review		

Unit 3 Energy Changes and Rates of Reaction

AAL	AFL	AOL
Calorimetry Problem Set	Potential Energy Diagram Assessment	Reaction Rate Assignment
Hess' Law Problem Set	Midterm Student Teacher Conversation	Unit 3 STSE Project
Standard Enthalpy of Formation Problem Set		Unit 3 Lab Investigation
Thermochemistry Practice Quiz		Unit 3 Test
Rate Law Problem Set		
Unit 3 Review		

Unit 4 Chemical Systems and Equilibrium

AAL	AFL	AOL
Equilibrium Problem Set	Real World Equilibrium Example	Unit 4 STSE Project: Observation
Reaction Quotient Problem Set	LeChatelier's Principle	Unit 4 Lab Investigation
Weak Acids & Bases Problem Set	Haber Process Assessment	Unit 4 Test
Acid-Base Titration Problem Set	Relevance of Solubility in the Human Body Assessment	
Unit 4 Review		

Unit 5 Electrochemistry

AAL	AFL	AOL
Introduction to Redox Reactions Problem Set	Real World Electrochemistry Examples	Unit 5 STSE Project
Half Reaction Method Problem Set	Metallurgist for a Day	Unit 5 Lab Investigation
Galvanic Cell Problem Set		Unit 5 Test
Unit 5 Review	Final Student Teacher Conversation	

AOL
Final Exam

CONSIDERATION FOR PROGRAM PLANNING

PLANNING PROGRAMS FOR STUDENTS WITH SPECIAL EDUCATION NEEDS

OES teachers are the key educators of students with special education needs and have a responsibility to help all students learn. Program planning for students with special education needs is guided by the principles set out in Learning for All: A Guide to Effective Assessment and Instruction for All Students, Kindergarten to Grade

12 (2013): all students can succeed; each student has their own unique patterns of learning; successful instructional practices are founded on evidence-based research, tempered by experience; and universal design and differentiated instruction are effective and interconnected means of meeting the learning or productivity needs of any group of students. Where a student has an Individual Education Plan (IEP), the accommodations identified in the IEP — instructional, environmental, and assessment — are implemented within the course, and the online learning environment is adapted accordingly. The asynchronous structure of OES courses provides built-in flexibility that supports many common accommodations, including extended time for assignments and assessments, breaks as needed, access to assistive technology, and the ability to review instructional material multiple times.

PROGRAM CONSIDERATIONS FOR ENGLISH LANGUAGE LEARNERS

Ontario schools have some of the most linguistically diverse student populations in the world, and OES serves English language learners across Ontario and internationally. English language learners may be Canadian-born or newcomers; they may have experience of highly sophisticated educational systems or may have come from regions where access to formal schooling was limited. In planning this course, teachers consider the strengths and needs of English language learners and provide appropriate adaptations consistent with English Language Learners / ESL and ELD Programs and Services: Policies and Procedures for Ontario Elementary and Secondary Schools, Kindergarten to Grade 12 (2007). Supports within the online environment include modification of instructional language without modification of curriculum expectations, use of visual and multimedia supports, opportunities to replay and review lesson content, extended time where appropriate, and teacher feedback that models academic English. Assessment accommodations, such as granting additional time and permitting the use of bilingual dictionaries, are provided where appropriate.

ENVIRONMENTAL EDUCATION

Consistent with Acting Today, Shaping Tomorrow: A Policy Framework for Environmental Education in Ontario Schools (2009) and Environmental Education: Scope and Sequence of Expectations (2017), environmental education is embedded across the curriculum rather than treated as a separate subject. Teachers help students acquire knowledge about the environment, develop skills to address environmental issues, and foster attitudes that motivate responsible environmental action. As an online school, OES also models environmental responsibility through paperless course delivery and the elimination of daily commuting. Environmental education is a natural fit in this course: students investigate the relationships between science, technology, society, and the environment, including topics such as sustainability, resource use, and the environmental impact of human activity, consistent with the STSE focus of the Ontario science curriculum.

EQUITY AND INCLUSIVE EDUCATION

This course is planned and delivered in accordance with Ontario's Equity and Inclusive Education Strategy (2009) and Policy/Program Memorandum No. 119, Developing and Implementing Equity and Inclusive Education Policies in Ontario Schools (2013). OES is committed to an inclusive learning environment in which all students feel welcomed, respected, and able to succeed, regardless of ancestry, culture, ethnicity, sex, gender identity, sexual orientation, disability, race, religion, or socio-economic status. In this course, teachers select learning materials that reflect the diversity of Ontario and the wider world, address bias in texts and resources where it arises, and ensure that assessment practices are fair and free of cultural assumptions. Because OES students learn from communities across Ontario, Quebec, and around the world, discussion activities and teacher feedback are moderated to maintain a respectful, harassment-free environment for all learners.

FINANCIAL LITERACY EDUCATION

In accordance with A Sound Investment: Financial Literacy Education in Ontario Schools (2010) and current Ministry direction on financial literacy, students are provided with opportunities to build the knowledge and skills needed to make informed financial decisions, understand their roles as consumers and citizens, and think critically about the economic forces that affect their lives. OES also supports students in meeting the

Ministry's financial literacy graduation requirement, as described in the OES School Course Calendar. In this course, students consider the economic dimensions of scientific and technological choices, including cost-benefit analysis of technologies and the financial implications of decisions that affect health and the environment.

FIRST NATIONS, MÉTIS, AND INUIT EDUCATION

Program planning in this course aligns with the Ontario First Nation, Métis, and Inuit Education Policy Framework (2007), which supports improved outcomes for First Nations, Métis, and Inuit students and promotes awareness and understanding of Indigenous histories, cultures, perspectives, and contributions among all students. Where appropriate to the curriculum expectations, teachers incorporate Indigenous perspectives, authors, and content, and approach these topics with accuracy and respect, drawing on Ministry-recommended resources. All OES students benefit from opportunities to deepen their knowledge of the histories and contemporary realities of First Nations, Métis, and Inuit peoples, including the legacy of the residential school system and the Truth and Reconciliation Commission's Calls to Action related to education.

THE ROLE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

Information and communications technology (ICT) is integral to every OES course: instruction, learning activities, assessment, and teacher-student communication all take place through the school's learning management system. ICT tools — including multimedia lessons, digital texts, simulations, video conferencing for proctored assessments, and word-processing and productivity software — extend and enrich instruction and allow students to collect, organize, and present their learning in a range of formats. Teachers help students develop digital citizenship skills, including responsible and ethical use of technology, critical evaluation of online sources, protection of personal information, and academic integrity in digital environments, consistent with OES's Acceptable Use, Academic Honesty, and Artificial Intelligence policies as published in the School Course Calendar.

CAREER EDUCATION

Consistent with *Creating Pathways to Success: An Education and Career/Life Planning Program for Ontario Schools* (2013), teachers support students in answering the four questions at the centre of education and career/life planning: Who am I? What are my opportunities? Who do I want to become? What is my plan for achieving my goals? Expectations in this course include many opportunities for students to apply their skills to work-related situations, explore educational and career options, and become self-directed learners. OES guidance staff support students in course selection, postsecondary application planning (including OUAC, CEGEP, and international pathways), and the development of individual pathways plans. This course supports pathways into health sciences, engineering, environmental science, research, technology, and the skilled trades, and career connections within scientific fields are highlighted throughout the course.

COOPERATIVE EDUCATION AND OTHER FORMS OF EXPERIENTIAL LEARNING

Planned learning experiences in the community, including job shadowing, work experience, and cooperative education, provide students with opportunities to see the relevance of their classroom learning, explore careers of interest, and develop essential workplace skills consistent with *The Ontario Curriculum, Grades 11 and 12: Cooperative Education* (2018). Students may earn up to two cooperative education credits toward their compulsory credit requirements for the Ontario Secondary School Diploma. Students interested in experiential learning opportunities related to this course are encouraged to contact OES guidance staff to discuss options available to them.

HEALTH AND SAFETY

Although OES students learn remotely, health and safety remain integral considerations in program planning. Teachers model and promote safe and healthy practices for online learning, including sound ergonomics, balanced screen time, regular breaks, and strategies that support positive mental health and well-being. OES maintains a safe and respectful virtual learning environment consistent with the school's codes of conduct, bullying prevention expectations, and privacy practices as published in the School Course Calendar, and students are provided with clear channels for reporting concerns to their teachers, guidance staff, or the Principal. Where the course includes hands-on, at-home investigations, students receive explicit safety

instruction, use only safe household materials as directed, and are required to follow all stated precautions; virtual labs and simulations are used where hands-on activity would pose a risk in a home setting.

ACCOMMODATIONS

Accommodations will be based on meeting with parent, teachers, administration and external educational assessment report. The following three types of accommodations may be provided:

- ☐ **Instructional accommodations:** such as changes in teaching strategies, including styles of presentation, methods of organization, or use of technology and multimedia.
- ☐ **Environmental accommodations:** such as preferential seating or special lighting.
- ☐ **Assessment accommodations:** such as allowing additional time to complete tests or assignments or permitting oral responses to test questions.

Other examples of modifications and aids, which may be used in this course, are:

- ☐ Provide step-by-step instructions.
- ☐ Help students create organizers for planning tasks.
- ☐ Allow students to report verbally using a voice or video recording.
- ☐ Permit students a range of options for reporting tasks.
- ☐ Provide opportunities for enrichment.