



Ontario eSecondary School Course Outline 2026-2027

Ministry of Education Course Title: Science	
Ministry Course Code: SNC1W	
Course Type: De-streamed	
Grade: 9	
Credit Value: 1.0	
Prerequisite(s): None	
Department: Science	
Course developed by: Victoria Townsend	Date: August 31, 2022 Revised: August 1, 2026
Length: One Semester	Hours: 110
This course has been developed based on the following Ministry documents: 1. Science SNC1W, The Ontario Curriculum (2022) 2. Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools (2010) 3. Learning for All (2013)	

COURSE DESCRIPTION/RATIONALE

This course enables students to develop their understanding of concepts related to biology, chemistry, physics, and Earth and space science, and to relate science to technology, society, and the environment. Throughout the course, students will develop and refine their STEM skills as they use scientific research, scientific experimentation, and engineering design processes to investigate concepts and apply their knowledge in situations that are relevant to their lives and communities. Students will continue to develop transferable skills as they become scientifically literate global citizens.

OVERALL CURRICULUM EXPECTATIONS

A. STEM Skills, Careers, and Connections

By the end of this course, students will:

- A1. STEM Investigation Skills - apply scientific processes and an engineering design process in their investigations to develop a conceptual understanding of the science they are learning, and apply coding skills to model scientific concepts and relationships
- A2. Applications, Careers, and Connections - analyse how scientific concepts and processes can be applied in practical ways to address real-world issues and in various careers, and describe contributions to science from people with diverse lived experiences

In the subsequent strands, students integrate learning from Strand A into Strand B, C, D and E as they investigate concepts, develop and apply skills, and make meaningful connections to their lives, their communities, and the environment.

B. Sustainable Ecosystems and Climate Change (Biology)

By the end of this course, students will:

- B1. Relating Science to Our Changing World - assess impacts of climate change on ecosystem sustainability and on various communities, and describe ways to mitigate these impacts
- B2. Investigating and Understanding Concepts - demonstrate an understanding of the dynamic and interconnected nature of ecosystems, including how matter cycles and energy flows through ecosystems

C. The Nature of Matter (Chemistry)

By the end of this course, students will:

- C1. Relating Science to Our Changing World - assess social, environmental, and economic impacts of the use of elements, compounds, and associated technologies
- C2. Investigating and Understanding Concepts - demonstrate an understanding of the nature of matter, including the structure of the atom, physical and chemical properties of common elements and compounds, and the organization of elements in the periodic table

D. Principles and Applications of Electricity (Physics)

By the end of this course, students will:

- D1. Relating Science to Our Changing World - assess social, environmental, and economic impacts of electrical energy production and consumption, and describe ways to achieve sustainable practices
- D2. Investigating and Understanding Concepts - demonstrate an understanding of the nature of electric charges, including properties of static and current electricity

E. Space Exploration (Earth and Space Science)

By the end of this course, students will:

- E1. Relating Science to Our Changing World - evaluate social, environmental, and economic impacts of space exploration and of technological innovations derived from space exploration
- E2. Investigating and Understanding Concepts - demonstrate an understanding of the components, characteristics, and associated phenomena of the solar system and the universe, and the importance of the Sun to processes on Earth

COURSE CONTENT

<i>Unit</i>	<i>Length</i>
Unit 0: Welcome and Intro to STEM	1.5 hour
Unit 1: Sustainable Ecosystems and Climate Change (Biology)	26 hours
Unit 2: Nature of Matter (Chemistry) and Midterm	30 hours
Unit 3: Characteristics and Applications of Electricity (Physics)	26 hours
Unit 4: Space Exploration (Earth and Space Science)	25 hours
Final Exam	1.5 hours
Total	110 Hours

UNIT DESCRIPTIONS

UNIT 1: Sustainable Ecosystems and Climate Change (Biology)

In this unit, students will develop an understanding of sustainable ecosystems and how sustainability is related to various ecological factors and processes, such as biodiversity, air and water quality, and soil health. Students assess how human activities impact the environment, including how they contribute to climate change, and explore ways to address some of the impacts. Students will investigate the flow of energy and the cycling of matter in the environment and the importance of these natural processes in maintaining a dynamic equilibrium in ecosystems. In doing so, students will interpret, investigate, apply, analyze, design for, and evaluate the following big ideas:

- Environmental sustainability depends on the dynamic equilibrium of ecosystems.
- The cycling of matter and flow of energy within and between Earth's four spheres are natural processes that help maintain balance in ecosystems.
- Human activities, including activities that contribute to climate change, impact environmental sustainability, and it is our collective responsibility to mitigate these impacts.

UNIT 2: Nature of Matter (Chemistry)

In this unit, students will explore the relevance of chemistry to their daily lives by investigating the use and safe disposal of various elements and compounds. Additionally, they assess the impacts of chemical processes and technologies on society and the environment. Students will investigate the nature of matter by studying properties of elements and compounds, the structure of atoms, and the relationship between the atomic structure of elements and the organization of the periodic table. In doing so, students will interpret, investigate, apply, analyze, design for, and evaluate the following big ideas:

- Atoms are the building blocks of matter.
- There is a relationship between the atomic structure of elements, their properties, and the organization of the periodic table.
- Elements and compounds have specific physical and chemical properties, which determine their uses.
- The use of elements and compounds in consumer products and chemical technologies has both positive and negative impacts on society, the economy, and the environment.

UNIT 3: Characteristics and Applications of Electricity (Physics)

In this unit, students will develop an understanding of the impacts of electrical energy production and consumption on society, the environment, and the economy, and explore ways to achieve sustainable practices. Students will also investigate the nature of electric charges, including properties of static and current electricity, and explain the relationships between various electrical quantities. In doing so, students will interpret, investigate, apply, analyze, design for, and evaluate the following big ideas:

- The distinct properties of static and current electricity can be explained by the behaviour of electric charges.
- Electrical energy can be produced from renewable and non-renewable sources and converted to other forms of energy to meet various needs.

- The production and consumption of electrical energy has social, economic, and environmental impacts that can be addressed through sustainable practices.

UNIT 4: Space Exploration (Earth and Space Science)

In this unit, students investigate the impacts of space exploration on society, the environment, and the economy, and the importance to society of technological innovations resulting from space exploration. Students also learn about the components of the solar system and the universe and the Sun's relationship to processes on Earth. In doing so, students will interpret, investigate, apply, analyze, design for, and evaluate the following big ideas:

- The solar system and the universe have various components with distinct characteristics that can be investigated and quantified.
- The Sun plays a critical role in sustaining life on Earth and in contributing to renewable energy production.
- Space observation, space exploration, and associated space exploration technologies advance our understanding of the universe, and have social, economic, and environmental impacts.

UNIT 5: Cumulative Assessments (Final Exam)

For the final project, students will relate all four units to the Canadian tar sands project. Students will analyze science concepts and theories from each unit in the context of a real life engineering and science application, establishing a basis of scientific analysis to evaluate this project in terms of innovation (science and engineering), the environment, and social issues including eco-justice and indigenous rights. Equal emphasis is placed on knowledge, thinking, communication and application. Finally, students will finish the course with a two hour, comprehensive proctored exam.

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 and Poodlls 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.

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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.

Cases are summaries of real-life problems wherein students relate scientific theories/concepts/formulas towards solving the problem in a real-world context. This helps students to understand the application and use of knowledge.

Maps are visual representations that relate scientific ideas/concepts/applications to geographic data. For example, we can understand that based on how the earth revolves around the sun and rotates on its axis, different areas of the world see the sun rise and set at different times. We can plot this data on a map to show time zones.

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.

Design projects are an opportunity for students to put their learning to the test in a real-world scenario, to address a design problem with a direct connection to people, the environment, economics, etc. Students collect information, apply problem solving, and use critical thinking to develop practical solutions that directly address their design problems.

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

A number of assessments are used throughout the unit, typically one per lesson. Students are urged to complete each assessment fully to truly test their knowledge and understanding of concepts. This provides the teacher with an opportunity to provide feedback that can improve a student's learning (AFL/AOL) and evaluate it (AOL). Students are encouraged to ask the teacher if they have questions relating to an assessment, especially an AOL to ensure that the student receives the best mark possible. Assessment practices can nurture a student's sense of progress and provide a motivation for continued learning. A variety of assessment designs are incorporated in each unit, to ensure that students are learning and assessing their learning in a variety of ways. Rubrics and marking schemes are outlined where appropriate, and students are encouraged to self-evaluate their work using these tools.

ASSESSMENT ACTIVITIES

- True and false questions
- Definition questions
- Fill in the blank (e.g. with tables) questions
- Short answer questions
- Long answer questions
- Reflections
- Drawings / diagrams / sketches / schematics - creating, labeling, and analyzing
- Problem solving calculations
- Lab reports
- Simulation, lab, and case study worksheets
- Research projects and reports
- Design projects and reports
- End of unit conversations (google meets)
- End of unit poodll elevator pitches (1 minute speech recording)
- Final 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.
- 20% 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.
- 15% 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 Boreal Forest Research Study	Students will research ecology concepts that relate to the Boreal Forest.	K, T, C, A	7
Unit 1 Climate Change Elevator Pitch	Students will create a one minute speech about why climate change matters based on scientific evidence.	K, T, C, A	3
Unit 1 Wildlife	Students will evaluate a wildlife crossing using the	K, T, C, A	7

Crossing Assessment	environmental assessment model.		
Unit 2 Superhero Element Project	Students will research an element and apply creative problem solving to design a superhero that embodies their element's chemical and physical properties.	K, T, C, A	6
Unit 2 Conversation	Students will discuss various questions from unit 2 with the course instructor. This is also an opportunity for students to ask questions before the midterm exam.	K, T, C, A	3
Midterm Assignment	Students will complete a summative assignment on Units 1 and 2.	K,T,C,A	7
Unit 3 Nuclear Power and Implications Project	Students will look at the technology behind nuclear power as well as its social, environmental, and economic implications.	K,T,C,A	6
Unit 3 Energy Usage Elevator Pitch	Students will create their own one minute speech about solving common energy usage issues.	K,T,C,A	3
Unit 3 Arctic Energy Design Project	Students will engage in the design of a greenhouse for the arctic to promote food security.	K,T,C,A	7
Unit 4 Humans and Technology in Space	Students will research Canada's contributions to space exploration and analyze human impacts of space travel.	K,T,C,A	7
Unit 4 Conversation	Students will discuss various questions from unit 4 with the course instructor. This is also an opportunity for students to ask questions before the final exam.	K,T,C,A	2
Unit 4 Space Research that Helps Our Everyday Life	Students will research space scientific discovery spin-offs and technology transfer that benefit the public and every day life.	K,T,C,A	7

FINAL EVALUATIONS (20%)

Evaluation Item	Description	Category	Weight
Final Exam	Students will complete this proctored two hour exam that addresses all four units in the course.	K,T,C,A	20

ATTENDANCE AND PARTICIPATION (15%)

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	8
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	7

AFL/AAL/AOL TRACKING SHEET

Unit 1: Sustainable Ecosystems and Climate Change (Biology)

AAL	AFL	AOL
Food Chains, Food Webs, and Energy Pyramid	Your Ecosystem	Boreal Forest Research Study
Gizmo Food Chain and Population Worksheet	Population Dynamics	Climate Change Elevator Pitch
Gizmo Photosynthesis Lab Worksheet	Gizmo Nitrogen Cycle STEM Case	Wildlife Crossing Environmental Assessment

Unit 2: Nature of Matter (Chemistry)

AAL	AFL	AOL
Gizmo Phase Changes Worksheet	Gizmo Density Lab Worksheet	Superhero Element Project
Physics vs. Chemical Properties and Changes	Bohr-Rutherford Diagrams	End of Unit 2 Conversation and Observation
Elements and Atoms	Exploring the Periodic Table	Midterm Assignment
Classifying Matter	Compounds and Molecules	

Unit 3: Characteristics and Applications of Electricity (Physics)

AAL	AFL	AOL
Introduction to Electricity	Charging an Object	Nuclear Power and Social-Environmental-Economic Implications Project
Current, Voltage and Resistance	Circuit Diagrams	Energy Usage Elevator Pitch
Gizmo Household Energy Usage Worksheet	Gizmo Circuits Lab Worksheet	Arctic Energy Design Project

Unit 4: Space Exploration (Earth and Space Science)

AAL	AFL	AOL
Introduction to Astronomy	Gizmo H-R Diagram Worksheet	Humans and Technology in Space
Planetary Database	Space Motion and Distance	End of Unit 4 Conversation and Observation
Celestial Objects in Our Solar System	Gizmo Big Bang Worksheet	Space Research that Helps Our Everyday Life

Unit 5: Cumulative Assessments

AAL	AFL	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 parents, teachers, administration and external educational assessment reports. 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.
- ☐ **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 writing tasks.
- ☐ Allow students to report verbally to a scribe (teacher/ student) who can help in note taking.
- ☐ Permit students a range of options for reading and writing tasks.
- ☐ Where an activity requires reading, provide it in advance.
- ☐ Provide opportunities for enrichment.