Course List for 2016-2017 Semester 1 eLearning Session  

Note: Students taking any course in our e-Learning program MUST have access to Microsoft Office Suite software (word processor, spreadsheet, presentation and publisher). Assignments need to be submitted as an .rft file. Students taking any mathematics course in our online program MUST have a scientific calculator in addition to any specific requirements listed below. A graphing calculator (e.g. TI83+) is highly desirable. All eLearning courses are offered through our e-Learning Ontario website.

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Textbook(s), Software, Specific Requirements</th>
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</thead>
<tbody>
<tr>
<td><strong>Grade 9</strong></td>
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<tr>
<td>Information &amp; Communication Technology in Business (Open)</td>
<td>BTT1O</td>
<td>No text required.</td>
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<tr>
<td>Issues in Canadian Geography (Academic)</td>
<td>CGC1D</td>
<td>No text required.</td>
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</tbody>
</table>
| English (Academic)                         | ENG1D| Short Stories:  
  *Lamb to the Slaughter* by Roald Dahl  
  *Just Lather, That’s All* by Hernando Tellez  
  Novel:  
  *The Chrysalids* by John Wyndam  
  *Romeo and Juliet* by William Shakespeare |
| Foundations of Mathematics (Applied)       | MFM1P| Geometer’s Sketchpad - Please make arrangements with your teacher. |
| Principles of Mathematics (Academic)       | MPM1D| Geometer’s Sketchpad - Please make arrangements with your teacher.  
  Graphing calculator would be an asset. |
| Mathematics (Transfer Course)              | MPM1H| Geometer’s Sketchpad - Please make arrangements with your teacher.  
  Graphing calculator would be an asset. |
| **Grade 10**                                |      |                                                                    |
| Media Arts (Open)                          | ASM2O| Graphic software (e.g. Photoshop, GIMP, Fireworks, Inkscape, Pixelmator)  
  - some are free downloads  
  Digital Camera  
  Some of the following: scanner, microphone, video camera |
<p>| Canadian History Since World War I (Academic) | CHC2D| No text required.                                                   |</p>
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<tr>
<td>Civics (Open)</td>
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<tr>
<td>Civics (French Immersion – Open)</td>
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</table>
| English (Academic) | ENG2D | *Lee, Harper To Kill a Mocking Bird*  
*Shakespeare, William *Macbeth* |
| English (Applied) | ENG2P | No text required with the exception of a novel. |
| Careers (Open) | GLC2O | No text required. |
| International Languages - Spanish (Academic) | LWSBD | No text required. |
| Careers (French Immersion – Open) | GLC2OFI | No text required. |
| Foundations of Mathematics (Applied) | MFM2P | Geometer’s Sketchpad - Please make arrangements with your teacher.  
Graphing calculator would be an asset. |
| Principles of Mathematics (Academic) | MPM2D | Geometer’s Sketchpad - Please make arrangements with your teacher.  
Graphing calculator would be an asset. |
| Science (Academic) | SNC2D | No text required. |

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| Financial Accounting Fundamentals (University/College) | BAF3M | Simply Accounting (optional)  
Microsoft WORD and EXCEL are required for the course |
| Cooperative Education (Open) (French and English) | COOP | No text required, but you are responsible for finding your own placement.  
CDSBEO students only. |
| English (College) | ENG3C | Ye, Ting-Xing. *Throwaway Daughter*.  
| English (University) | ENG3U | *A Midsummer Night’s Dream* by  
*William Shakespeare*  
One of the following novels:  
The Book Thief, by Markus Zusak,  
The Girls, by Lori Lansens, or  
Sarah’s Key, by Tatiana de Rosnay. |
| Foundations of College Mathematics (College) | MBF3C | Geometer’s Sketchpad - Please make arrangements with your teacher.  
Graphing calculator would be an asset. |
| Functions (University) | MCR3U | Geometer’s Sketchpad - Please make arrangements with your teacher.  
Graphing calculator would be an asset. |
<p>| Health for Life (College) | PPZ3C | No text required. |</p>
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<tr>
<td>Biology (College)</td>
<td>SBI3C</td>
<td>No text required.</td>
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<tr>
<td>Biology (University)</td>
<td>SBI3U</td>
<td>No text required.</td>
</tr>
<tr>
<td>Chemistry (University)</td>
<td>SCH3U</td>
<td>No text required.</td>
</tr>
<tr>
<td>Physics (University)</td>
<td>SPH3U</td>
<td>No text required.</td>
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<tr>
<td>Grade 12</td>
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<tr>
<td>Financial Accounting Principles (University/College)</td>
<td>BAT4M</td>
<td>Simply Accounting (optional) Microsoft WORD and EXCEL are required for the course</td>
</tr>
<tr>
<td>Canada: History, Identity, and Culture (University)</td>
<td>CHI4U</td>
<td>No text required.</td>
</tr>
<tr>
<td>Analysing Current Economic Issues (University)</td>
<td>CIA4U</td>
<td>No text required.</td>
</tr>
<tr>
<td>Canadian and International Law (University)</td>
<td>CLN4U</td>
<td>No text required</td>
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<td>COOP</td>
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<td>English (College)</td>
<td>ENG4C</td>
<td>Novel: one of Green, John <em>Looking for Alaska</em> Alexie Sherman <em>The Absolutely True Diary of a Part Time Indian</em> Hopkins, Ellen <em>Crank</em> Chbosky, Stephen <em>The Perks of Being a Wallflower</em> Frey, James <em>A Million Little Pieces</em> Choy, Wayson <em>The Jade Peony</em></td>
</tr>
<tr>
<td>English (University)</td>
<td>ENG4U</td>
<td>Novel: <em>Life of Pi</em>; Play: <em>Hamlet</em></td>
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<tr>
<td>Families in Canada (University)</td>
<td>HHS4U</td>
<td>No text required.</td>
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<td>Calculus and Vectors (University)</td>
<td>MCV4U</td>
<td>No text required.</td>
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<td>Advanced Functions (University)</td>
<td>MHF4U</td>
<td>Geometer’s Sketchpad - Please make arrangements with your teacher. Graphing calculator would be an asset.</td>
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<td>Subject</td>
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<td>Notes</td>
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Course Descriptions

The Arts

Media Arts, Grade 10, Open (ASM2O)
This course enables students to create media art works by exploring new media, emerging technologies such as digital animation, and a variety of traditional art forms such as film, photography, video, and visual arts. Students will acquire communications skills that are transferable beyond the media arts classroom and develop an understanding of responsible practices related to the creative process. Students will develop the skills necessary to create and interpret media art works. Prerequisite: None

Business

Financial Accounting Fundamentals, Grade 11, University/College (BAF3M)
This course introduces students to the fundamental principles and procedures of accounting. Students will develop financial analysis and decision-making skills that will assist them in future studies and/or career opportunities in business. Students will acquire an understanding of accounting for a service and a merchandising business, computerized accounting, financial analysis, and ethics and current issues in accounting. Prerequisite: None

Financial Accounting Principles, Grade 12, University/College (BAT4M)
This course introduces students to advanced accounting principles that will prepare them for postsecondary studies in business. Students will learn about financial statements for various forms of business ownership and how those statements are interpreted in making business decisions. This course expands students’ knowledge of sources of financing, further develops accounting methods for assets, and introduces accounting for partnerships and corporations. Prerequisite: Financial Accounting Fundamentals, Grade 11, University/College Preparation

Information and Communication Technology in Business, Grade 9, Open (BTT1O)
This course introduces students to information and communication technology in a business environment and builds a foundation of digital literacy skills necessary for success in a technologically driven society. Students will develop word processing, spreadsheet, database, desktop publishing, presentation software, and website design skills. Throughout the course, there is an emphasis on digital literacy, effective electronic research and communication skills, and current issues related to the impact of information and communication technology. Prerequisite: None

Canadian and World Studies
Issues in Canadian Geography, Grade 9 Academic (CGC1D)
This course examines interrelationships within and between Canada’s natural and human systems and how these systems interconnect with those in other parts of the world. Students will explore environmental, economic, and social geographic issues relating to topics such as transportation options, energy choices, and urban development. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate various geographic issues and to develop possible approaches for making Canada a more sustainable place in which to live.
*Prerequisite:* None

Canadian History since World War I, Grade 10 Academic (CHC2D)
This course explores social, economic, and political developments and events and their impact on the lives of different groups in Canada since 1914. Students will examine the role of conflict and cooperation in Canadian society, Canada’s evolving role within the global community, and the impact of various individuals, organizations, and events on Canadian identity, citizenship, and heritage. They will develop their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating key issues and events in Canadian history since 1914.
*Prerequisite:* None

Canada: History, Identity, and Culture, Grade 12, University (CHI4U)
This course explores the challenges associated with the formation of a Canadian national identity. Students will examine the social, political, and economic forces that have shaped Canada from the pre-contact period to the present and will investigate the historical roots of contemporary issues from a variety of perspectives. Students will use critical-thinking and communication skills to consider events and ideas in historical context, debate issues of culture and identity, and present their own views.
*Prerequisite:* Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities

Civics, Grade 10, Open (CHV2O) – (English or French Immersion)
This course explores what it means to be an informed, participating citizen in a democratic society. Students will learn about the elements of democracy in local, national, and global contexts, about political reactions to social change, and about political decision-making processes in Canada. They will explore their own and others’ ideas about civics questions and learn how to think critically about public issues and react responsibly to them.
*Prerequisite:* None

Analysing Current Economic Issues, Grade 12, University (CIA4U)
This course investigates the nature of the competitive global economy and explores how individuals and societies can gain the information they need to make appropriate economic decisions. Students will learn about the principles of microeconomics and macroeconomics, apply economic models and concepts to interpret economic information, assess the validity of statistics, and investigate marketplace dynamics. Students will use economic inquiry and communication skills to analyse current economic issues, make informed judgements, and present their findings.
*Prerequisite:* Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities
Canadian and International Law, Grade 12, University (CLN4U)
This course examines elements of Canadian and international law in social, political, and global contexts. Students will study the historical and philosophical sources of law and the principles and practices of international law and will learn to relate them to issues in Canadian society and the wider world. Students will use critical-thinking and communication skills to analyse legal issues, conduct independent research, and present the results of their inquiries in a variety of ways. **Prerequisite:** Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities

Cooperative Education

Cooperative Education (Grade 11 or 12) OFFERED IN FRENCH AND ENGLISH

Cooperative education is a planned learning experience, for which credits are earned, that integrates classroom theory and learning experiences at a workplace to enable students to apply and refine the knowledge and skills acquired in a related curriculum course or a locally developed course. **Prerequisite:** None

English

English, Grade 9, Academic (ENG1D)
This course is designed to develop the oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. Students will analyse literary texts from contemporary and historical periods, interpret informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on the use of strategies that contribute to effective communication. The course is intended to prepare students for the Grade 10 academic English course, which leads to university or college preparation courses in Grades 11 and 12. **Prerequisite:** None

English, Grade 10, Academic (ENG2D)
This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. Students will analyse literary texts from contemporary and historical periods, interpret and evaluate informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on the selective use of strategies that contribute to effective communication. This course is intended to prepare students for the compulsory Grade 11 university or college preparation course. **Prerequisite:** Grade 9 English, Academic or Applied
English, Grade 10, Applied (ENG2P)
This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in secondary school and daily life. Students will study and create a variety of informational, literary, and graphic texts. An important focus will be on the consolidation of strategies and processes that help students interpret texts and communicate clearly and effectively. This course is intended to prepare students for the compulsory Grade 11 college or workplace preparation course.
Prerequisite: Grade 9 English, Academic or Applied

English, Grade 11, College (ENG3C)
This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will study the content, form, and style of a variety of informational and graphic texts, as well as literary texts from Canada and other countries, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity. The course is intended to prepare students for the compulsory Grade 12 college preparation course.
Prerequisite: Grade 10 English, Applied

English, Grade 11, University (ENG3U)
This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse challenging literary texts from various periods, countries, and cultures, as well as a range of informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on using language with precision and clarity and incorporating stylistic devices appropriately and effectively. The course is intended to prepare students for the compulsory Grade 12 university or college preparation course.
Prerequisite: Grade 10 English, Academic

English, Grade 12, College (ENG4C)
This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a variety of informational and graphic texts, as well as literary texts from various countries and cultures, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity and developing greater control in writing. The course is intended to prepare students for college or the workplace.
Prerequisite: Grade 11 English, College Preparation

English, Grade 12, University (ENG4U)
This course emphasizes the consolidation of the literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. An important focus will be on using academic language coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. The course is intended to prepare students for university, college, or the workplace.
Prerequisite: Grade 11 English, University Preparation
Guidance and Careers

Career Studies, Grade 10, Open (GLC2O) – (ENGLISH OR FRENCH IMMERSION)
This course teaches students how to develop and achieve personal goals for future learning, work, and community involvement. Students will assess their interests, skills, and characteristics and investigate current economic and workplace trends, work opportunities, and ways to search for work. The course explores postsecondary learning and career options, prepares students for managing work and life transitions, and helps students focus on their goals through the development of a career plan.
Prerequisite: None

Health and Physical Education

Health for Life, Grade 11, College (PPZ3C)
This course helps students develop a personalized approach to healthy living. Students will examine the factors that affect their own health and the health of individuals as members of the community. They will learn about the components of the Vitality approach to healthy living – an initiative that promotes healthy eating, an active lifestyle, and a positive self-image. Throughout this course, students will develop the skills necessary to take charge of and improve their own health, as well as to encourage others to lead healthy lives.
Prerequisite: None

International Languages

International Languages - Spanish, Level 1, Academic (LWSBD)
This course provides opportunities for students to begin to develop and apply skills in listening, speaking, reading, and writing in the language of study. Students will communicate and interact in structured activities, with a focus on matters of personal interest and familiar topics, and will read and write simple texts in the language. Throughout the course, students will acquire an understanding and appreciation of diverse communities in regions of the world where the language is spoken. They will also develop skills necessary for lifelong language learning.
Prerequisite: None

Mathematics

Foundations for College Mathematics, Grade 11, College (MBF3C)
This course enables students to broaden their understanding of mathematics as a problem solving tool in the real world. Students will extend their understanding of quadratic relations; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; develop their ability to reason by collecting, analysing, and evaluating data involving one variable; connect probability and statistics; and solve problems in geometry and trigonometry. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.
Prerequisite: Foundations of Mathematics, Grade 10, Applied
Functions, Grade 11, University (MCR3U)
This course introduces the mathematical concept of the function by extending students’ experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; investigate inverse functions; and develop facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems.
Prerequisite: Principles of Mathematics, Grade 10, Academic

Calculus and Vectors, Grade 12, University (MCV4U)
This course builds on students’ previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors and representations of lines and planes in three-dimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, sinusoidal, exponential, rational, and radical functions; and apply these concepts and skills to the modelling of real-world relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who choose to pursue careers in fields such as science, engineering, economics, and some areas of business, including those students who will be required to take a university-level calculus, linear algebra, or physics course.
Prerequisite: Note: Advanced Functions, Grade 12, University preparation, must be taken prior to or concurrently with Calculus and Vectors.

Foundations of Mathematics, Grade 9, Applied (MFM1P)
This course enables students to develop an understanding of mathematical concepts related to introductory algebra, proportional reasoning, and measurement and geometry through investigation, the effective use of technology, and hands-on activities. Students will investigate real-life examples to develop various representations of linear relations, and will determine the connections between the representations. They will also explore certain relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.
Prerequisite: None

Foundations of Mathematics, Grade 10, Applied (MFM2P)
This course enables students to consolidate their understanding of linear relations and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and hands-on activities. Students will develop and graph equations in analytic geometry; solve and apply linear systems, using real-life examples; and explore and interpret graphs of quadratic relations. Students will investigate similar triangles, the trigonometry of right triangles, and the measurement of three-dimensional figures. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.
Prerequisite: Grade 9 Mathematics, Academic or Applied
Advanced Functions, Grade 12, University (MHF4U)
This course extends students’ experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric functions; develop techniques for combining functions; broaden their understanding of rates of change; and develop facility in applying these concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended both for students taking the Calculus and Vectors course as a prerequisite for a university program and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs.
Prerequisite: Functions, Grade 11, University Preparation, or Mathematics for College Technology, Grade 12, College Preparation

Mathematics Transfer, Grade 9, Applied to Academic (MPM1H)
This transfer course will provide students who have successfully completed Foundations of Mathematics, Grade 9, Applied, with an opportunity to achieve the expectations not covered in that course but included in Principles of Mathematics, Grade 9, Academic. On successful completion of this transfer course, students may proceed to Principles of Mathematics, Grade 10, Academic (MPM2D). This transfer course focuses on developing number sense and algebra, linear relations, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will reason mathematically and communicate their thinking as they solve multi-step problems.
Prerequisite: Foundations of Mathematics, Grade 9, Applied (MFM1P)

Principles of Mathematics, Grade 9, Academic (MPM1D)
This course enables students to develop an understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will then generalize as equations of lines, and will determine the connections between different representations of a linear relation. They will also explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems.
Prerequisite: None

Principles of Mathematics, Grade 10, Academic (MPM2D)
This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic relations and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute triangles. Students will reason mathematically and communicate their thinking as they solve multi-step problems.
Prerequisite: Grade 9 Mathematics, Academic, or Grade 9 Mathematics Transfer, Applied to Academic
Science

**Biology, Grade 11, College (SBI3C)**
This course focuses on the processes that occur in biological systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, genetics, the anatomy of mammals, and the structure of plants and their role in the natural environment. Emphasis will be placed on the practical application of concepts, and on the skills needed for further study in various branches of the life sciences and related fields.

*Prerequisite:* Grade 10 Science, Academic or Applied

**Biology, Grade 11, University (SBI3U)**
This course furthers students’ understanding of the processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biodiversity; evolution; genetic processes; the structure and function of animals; and the anatomy, growth, and function of plants. The course focuses on the theoretical aspects of the topics under study, and helps students refine skills related to scientific investigation.

*Prerequisite:* Grade 10 Science, Academic

**Biology, Grade 12, University (SBI4U)**
This course provides students with the opportunity for in-depth study of the concepts and processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biochemistry, metabolic processes, molecular genetics, homeostasis, and population dynamics. Emphasis will be placed on the achievement of detailed knowledge and the refinement of skills needed for further study in various branches of the life sciences and related fields.

*Prerequisite:* Grade 11 Biology, University Preparation

**Chemistry, Grade 11, University (SCH3U)**
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.

*Prerequisite:* Grade 10 Science, Academic

**Chemistry, Grade 12, University (SCH4U)**
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.

*Prerequisite:* Grade 11 Chemistry, University Preparation
Earth and Space Science, Grade 12, University (SES4U)
This course develops students’ understanding of Earth and its place in the universe. Students will investigate the properties of and forces in the universe and solar system and analyse techniques scientists use to generate knowledge about them. Students will closely examine the materials of Earth, its internal and surficial processes, and its geological history, and will learn how Earth’s systems interact and how they have changed over time. Throughout the course, students will learn how these forces, processes, and materials affect their daily lives. The course draws on biology, chemistry, physics, and mathematics in its consideration of geological and astronomical processes that can be observed directly or inferred from other evidence.
Prerequisite: Grade 10 Science, Academic

Physics, Grade 11, University (SPH3U)
This course develops students’ understanding of the basic concepts of physics. Students will explore kinematics, with an emphasis on linear motion; different kinds of forces; energy transformations; the properties of mechanical waves and sound; and electricity and magnetism. They will enhance their scientific investigation skills as they test laws of physics. In addition, they will analyse the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment.
Prerequisite: Grade 10 Science, Academic

Physics, Grade 12, College (SPH4C)
This course develops students’ understanding of the basic concepts of physics. Students will explore these concepts with respect to motion; mechanical, electrical, electromagnetic, energy transformation, hydraulic, and pneumatic systems; and the operation of commonly used tools and machines. They will develop their scientific investigation skills as they test laws of physics and solve both assigned problems and those emerging from their investigations. Students will also consider the impact of technological applications of physics on society and the environment.
Prerequisite: Grade 10 Science, Academic or Applied

Physics, Grade 12, University (SPH4U)
This course enables students to deepen their understanding of physics concepts and theories. Students will continue their exploration of energy transformations and the forces that affect motion, and will investigate electrical, gravitational, and magnetic fields and electromagnetic radiation. Students will also explore the wave nature of light, quantum mechanics, and special relativity. They will further develop their scientific investigation skills, learning, for example, how to analyse, qualitatively and quantitatively, data related to a variety of physics concepts and principles. Students will also consider the impact of technological applications of physics on society and the environment.
Prerequisite: Grade 11 Physics, University Preparation

Science, Grade 10, Academic (SNC2D)
This course enables students to enhance their understanding of concepts in biology, chemistry, earth and space science, and physics, and of the interrelationships between science, technology, society, and the environment. Students are also given opportunities to further develop their scientific investigation skills. Students will plan and conduct investigations and develop their understanding of scientific theories related to the connections between cells and systems in animals and plants; chemical reactions, with a particular focus on acid–base reactions; forces that affect climate and climate change; and the interaction of light and matter.
Prerequisite: Grade 9 Science, Academic or Applied
Social Sciences and Humanities

Families in Canada, Grade 12, University (HHS4U)
This course enables students to draw on sociological, psychological, and anthropological theories and research to analyse the development of individuals, intimate relationships, and family and parent-child relationships. Students will focus on issues and challenges facing individuals and families in Canada’s diverse society. They will develop analytical tools that enable them to assess various factors affecting families and to consider policies and practices intended to support families in Canada. They will develop the investigative skills required to conduct and communicate the results of research on individuals, intimate relationships, and parent-child relationships.  
Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies