

Course List for 2019-2020 Summer eLearning Session July 2nd - July 27th, 2020.

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. All eLearning courses are offered through our [e-Learning Ontario website](#). Most novels and plays for English courses can be accessed through [SORA](#).

Course	Code
Grade 9	
Information & Communication Technology in Business (Open)	BTT1O
Issues in Canadian Geography (Academic)	CGC1D
Issues in Canadian Geography (Applied)	CGC1P
English (Academic)	ENG1D
English (Applied)	ENG1P
Principles of Mathematics (Academic)	MPM1D
Science (Academic)	SNC1D
Science (Applied)	SNC1P
Grade 10	
Canadian History Since World War I (Academic)	CHC2D
Canadian History Since World War I (Applied)	CHC2P
Civics (Open)	CHV2O
Civics (French Immersion – Open)	CHV2OFI
English (Academic)	ENG2D
English (Applied)	ENG2P
Careers (Open)	GLC2O
Careers (French Immersion – Open)	GLC2OFI
International Languages - Spanish (Academic)	LWSBD
Principles of Mathematics (Academic)	MPM2D
Science (Academic)	SNC2D
Science (Applied)	SNC2P
Grade 11	
English (College)	ENG3C
English (University)	ENG3U
Media Studies (Open)	EMS3O
Introduction to Anthropology, Psychology, and Sociology (University)	HSP3U

Grade 11	
Foundations of College Mathematics (College)	<u>MBF3C</u>
Functions and Applications (University/College)	<u>MCF3M</u>
Functions (University)	<u>MCR3U</u>
Mathematics for Everyday Life (Workplace)	<u>MEL3E</u>
Healthy Living and Personal and Fitness Activities (Open)	<u>PAF3O</u>
Health for Life (College)	<u>PPZ3C</u>
Biology (College)	<u>SBI3C</u>
Biology (University)	<u>SBI3U</u>
Chemistry (University)	<u>SCH3U</u>
Physics (University)	<u>SPH3U</u>
Grade 12	
International Business (University/College)	<u>BBB4M</u>
World History since the Fifteenth Century (University)	<u>CHY4U</u>
Economics (University)	<u>CIA4U</u>
Canadian and International Law (University)	<u>CLN4U</u>
Cooperative Education (Open) (French and English)	<u>COOP</u>
English (College)	<u>ENG4C</u>
English (University)	<u>ENG4E</u>
English (University)	<u>ENG4U</u>
The Writer's Craft (University)	<u>EWC4U</u>
French - Core (University)	<u>FSF4U</u>
Families in Canada (University)	<u>HHS4U</u>
Religion (Open)	<u>HRE4O</u>
Challenge and Change in Society (University)	<u>HSB4U</u>
World Cultures (University/College)	<u>HSC4M</u>
Philosophy: Questions and Theories (University)	<u>HZT4U</u>
Foundations for College Mathematics (College)	<u>MAP4C</u>
Mathematics of Data Management (University)	<u>MDM4U</u>
Advanced Functions (University)	<u>MHF4U</u>
Healthy Living and Personal and Fitness Activities (Open)	<u>PAF4O</u>
Introductions to Kinesiology (University)	<u>PSK4U</u>

Biology (University)	SBI4U
Grade 12	
Chemistry (College)	SCH4C
Chemistry (University)	SCH4U
Physics (College)	SPH4C
Physics (University)	SPH4U

Course Descriptions

Business

International Business Fundamentals, Grade 12, University/College (BBB4M)

This course provides an overview of the importance of international business and trade in the global economy and explores the factors that influence success in international markets. Students will learn about the techniques and strategies associated with marketing, distribution, and managing international business effectively. This course prepares students for postsecondary programs in business, including international business, marketing, and management.

Prerequisite: None

Information and Communication Technology in Business, Grade 9, Open (BTT10)

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

Issues in Canadian Geography, Grade 9, Applied (CGC1P)

This course focuses on current geographic issues that affect Canadians. Students will draw on their personal and everyday experiences as they explore issues relating to food and water supplies, competing land uses, interactions with the natural environment, and other topics relevant to sustainable living in Canada. They will also develop an awareness that issues that affect their lives in Canada are interconnected with issues in other parts of the world. Throughout the course, students will use the concepts of geographic thinking, the geographic inquiry process, and spatial technologies to guide and support their investigations. *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

Canadian History since World War I, Grade 10, Applied (CHC2P)

This course focuses on the social context of historical developments and events and how they have affected the lives of people in Canada, including First Nations, Métis, and Inuit individuals and communities, since 1914. Students will explore interactions between various communities in Canada as well as contributions of individuals and groups to heritage and identities in Canada. Students will develop an understanding of some key political developments and government policies that have had an impact on First Nations, Métis, and Inuit individuals and communities. 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 37 investigating the continuing relevance of historical developments and how they have helped shape communities in present-day Canada. *Prerequisite:* None

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

World History since the Fifteenth Century, Grade 12, University (CHY4U)

This course traces major developments and events in world history since approximately 1450. Students will explore social, economic, and political changes, the historical roots of contemporary issues, and the role of conflict and cooperation in global interrelationships. They will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, as they investigate key issues and ideas and assess societal progress or decline in world history. *Prerequisite:* Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities

Analysing Current Economic Issues, Grade 12, University (CIA4U)

This course examines current Canadian and international economic issues, developments, policies, and practices from diverse perspectives. Students will explore the decisions that individuals and institutions, including governments, make in response to economic issues such as globalization, trade agreements, economic inequalities, regulation, and public spending. Students will apply the concepts of economic thinking and the economic inquiry process, as well as economic models and theories, to investigate, and develop informed opinions about, economic trade-offs, growth, and sustainability and related economic issues. *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 9, Applied (ENG1P)

This course is designed to develop the key oral communication, reading, writing, and media literacy skills students need for success in secondary school and daily life. Students will read, interpret, and create a variety of informational, literary, and graphic texts. An important focus will be on identifying and using appropriate strategies and processes to improve students' comprehension of texts and to help them communicate clearly and effectively. The course is intended to prepare students for the Grade 10 applied English course, which leads to college or workplace 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, Workplace (ENG4E)

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will analyse informational, graphic, and literary texts and create oral, written, and media texts in a variety of forms for workplace-related and practical purposes. An important focus will be on using language accurately and organizing ideas and information coherently. The course is intended to prepare students for the workplace and active citizenship. *Prerequisite:* Grade 11 English, Workplace 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

Media Studies, Grade 11, Open (EMS30)

This course emphasizes knowledge and skills that will enable students to understand media communication in the twenty-first century and to use media effectively and responsibly. Through analysing the forms and messages of a variety of media works and audience responses to them, and through creating their own media works, students will develop critical thinking skills, aesthetic and ethical judgement, and skills in viewing, representing, listening, speaking, reading, and writing. *Prerequisite:* Grade 10 English, Academic or Applied

The Writer's Craft, Grade 12, University (EWC4U)

This course emphasizes knowledge and skills related to the craft of writing. Students will analyse models of effective writing; use a workshop approach to produce a range of works; identify and use techniques required for specialized forms of writing; and identify effective ways to improve the quality of their writing. They will also complete a major paper as part of a creative or analytical independent study project and investigate opportunities for publication and for writing careers. *Prerequisite:* Grade 11 English, University Preparation

French as a Second Language

Core French, Grade 12, University (FSF4U)

This course provides extensive opportunities for students to speak and interact in French independently. Students will develop their listening, speaking, reading, and writing skills, apply language learning strategies in a wide variety of real-life situations, and develop their creative and critical thinking skills through responding to and interacting with a variety of oral and written texts. They will also enrich their understanding and appreciation of diverse Frenchspeaking communities, and will develop skills necessary for lifelong language learning.

Prerequisite: Core French, Grade 11, University Preparation

Guidance and Careers

Career Studies, Grade 10, Open (GLC20) – (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

PAF30/40: Healthy Living and Personal and Fitness Activities

This course enables students to further develop the knowledge and skills they need to make healthy choices. It places special emphasis on how students can maintain the habits of healthy, active living throughout their lives as they make the transition to adulthood and independent living. Through goal setting and healthy eating students will enhance their personal fitness, and confidence. Students will use activity trackers to track their personal fitness and through consultation learn about acknowledging the factors and developing skills that contribute to healthy development and well-being.

Prerequisite: None

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

Introductory Kinesiology, Grade 12, University (PSK4U)

This course focuses on the study of human movement and of systems, factors and principles involved in human development. Students will learn about the effects of physical activity on health and performance, the evolution of physical activity and sport, and the physiological, psychological, and social factors that influence an individual's participation in physical activity and sport. The course prepares students for university programs in physical education and health, kinesiology, health sciences, health studies, recreation, and sports administration. *Prerequisite:* Any Grade 11 university or university/college preparation course in science, or any Grade 11 or 12 course in health and physical education

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 12, College (MAP4C)

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities,

budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades. Prerequisite: Foundations for College Mathematics, Grade 11, College Preparation, or Functions and Applications, Grade 11, University/College Preparation

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 and Applications, Grade 11, University/College (MCF3M)

This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in modelling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems. *Prerequisite:* Principles of Mathematics, Grade 10, Academic, or 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

Mathematics of Data Management, Grade 12, University (MDM4U)

This course broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing and analysing large amounts of information; solve problems involving probability and statistics; and carry out a culminating investigation that integrates statistical concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. Students planning to enter university 100 programs in business, the social sciences, and the humanities will find this course of particular interest. *Prerequisite:* Functions, Grade 11, University Preparation, or Functions and Applications, Grade 11, University/College Preparation

Mathematics for Work and Everyday Life, Grade 11, Workplace (MEL3E)

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will solve problems associated with earning money, paying taxes, and making purchases; apply calculations of simple and compound interest in saving, investing, and borrowing; and calculate the costs of transportation and travel in a variety of situations. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. *Prerequisite:* Principles of Mathematics, Grade 9, Academic, or Foundations of Mathematics, Grade 9, Applied, or a Grade 10 Mathematics LDCC (locally developed compulsory credit) course

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, College (SCH4C)

This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment. Students will use a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment. *Prerequisite:* Grade 10 Science, Academic or Applied

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

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 9, Academic (SNC1D)

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Throughout the course, students will develop their skills in the processes of scientific investigation. Students will acquire an understanding of scientific theories and conduct investigations related to sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of electricity. *Prerequisite:* None

Science, Grade 9, Applied (SNC1P)

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to apply their knowledge of science to everyday situations. They are also given opportunities to develop practical skills related to scientific investigation. Students will plan and conduct investigations into practical problems and issues related to the impact of human activity on ecosystems; the structure and properties of elements and compounds; space exploration and the components of the universe; and static and current electricity. *Prerequisite:* None

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

Science, Grade 10, Applied (SNC2P)

This course enables students to develop a deeper understanding of concepts in biology, chemistry, earth and space science, and physics, and to apply their knowledge of science in real-world situations. Students are given opportunities to develop further practical skills in scientific investigation. Students will plan and conduct investigations into everyday problems and issues related to human cells and body systems; chemical reactions; factors affecting 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

Church and Culture, Grade 12, Open (HRE40)

This course assists students in their development of the skills and knowledge necessary to live lives of full maturity. Within the Catholic faith tradition it is believed that this growth towards human maturity is best served when students are able to define themselves authentically in relation to their God, to other people and to their world. In the Family Life Education strand, students explore a variety of topics related to the themes of personhood, interpersonal relationships, and sexuality. Students will demonstrate a knowledge of the prophetic tradition in Scripture, become familiar with the social teachings of the Catholic Church, explore contemporary notions of spirituality and prayer, and recognize the importance, power and potential of the human person in relation to morality and personal choices concerning future life paths.

This course enables students to explore the moral principles of the Church and how these principles relate to them as individuals, and to contemporary culture as a whole. Students explore the role played by the Christian Scriptures, prayer, ritual, and the sacraments as they discern and live out their Christian vocation in their lives. This course also introduces students to skills used in researching and investigating contemporary moral issues and the guiding principles and teachings of the Roman Catholic Church.

Prerequisite: None

Challenge and Change in Society, Grade 12, University (HSB4U)

This course focuses on the use of social science theories, perspectives, and methodologies to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour and their impact on society. Students will critically analyse how and why cultural, social, and behavioural patterns change over time. They will explore the ideas of social theorists and use those ideas to analyse causes of and responses to challenges such as technological change, deviance, and global inequalities. Students will explore ways in which social science research methods can be used to study social change.

Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies

World Cultures, Grade 12, University/College (HSC4M)

This course examines the nature of culture; how cultural identities are acquired, maintained, and transformed; and theories used to analyse cultures. Students will explore world cultures, with an emphasis on the analysis of religious and spiritual beliefs, art forms, and philosophy. They will study the contributions and influence of a range of cultural groups and will critically analyse issues facing ethnocultural groups within Canada and around the world. Students will 117 develop and apply research skills and will design and implement a social action initiative relating to cultural diversity. *Prerequisite:* Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies

Introduction to Anthropology, Psychology, and Sociology, Grade 11, University (HSP3U)

This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science research, and to become familiar with current thinking on a range of issues within the three disciplines.

Prerequisite: The Grade 10 academic course in English, or the Grade 10 academic history course (Canadian and world studies)

Philosophy: Questions and Theories, Grade 12, University (HZT4U)

This course enables students to acquire an understanding of the nature of philosophy and philosophical reasoning skills and to develop and apply their knowledge and skills while exploring specialized branches of philosophy (the course will cover at least three of the following branches: metaphysics, ethics, epistemology, philosophy of science, social and political philosophy, aesthetics). Students will develop critical thinking and philosophical reasoning skills as they formulate and evaluate arguments related to a variety of philosophical questions and theories.

They will also develop research and inquiry skills related to the study and practice of philosophy.

Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies