

## COURSE DESCRIPTIONS

Ontario courses are designated by a 5-character code. The first three characters are letters which indicate the subject area. The fourth character indicates the designated grade (1=Gr. 9, 2=Gr. 10, 3=Gr. 11, 4=Gr. 12). The fifth character indicates the level of difficulty/destination of the course (D=academic, P=applied, O=open, U=university; C=college, M=university/college).

Following are brief descriptions of courses offered. Course outlines are on file in the Records Office and are available for parents and students who wish further information about specific courses.

**Please note: The Administration reserves the right to cancel and/or combine courses for which an insufficient number of students have enrolled.**



### The Arts

#### AVI20 (VISUAL ARTS, GRADE 10, OPEN)

This course enables students to develop their skills in producing and presenting art by introducing them to new ideas, materials, and processes for artistic exploration and experimentation. Students will apply the elements and principles of design when exploring the creative process. Students will use the critical analysis process to reflect on and interpret art within a personal, contemporary, and historical context.

*Prerequisite: None*

#### AVI30 (VISUAL ARTS, GRADE 11, OPEN)

This course focuses on studio activities in one or more of the visual arts, including drawing, painting, sculpture, photography, printmaking, collage, and/or multimedia art. Students will use the creative process to create art works that reflect a wide range of subjects and will evaluate works using the critical analysis process. Students will also explore works of art within a personal, contemporary, historical, and cultural context.

*Prerequisite: None*

#### AMI20 (INSTRUMENTAL MUSIC - BAND, GRADE 10, OPEN)

This course emphasizes the creation and performance of music at a level consistent with previous experience. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of musical conventions, practices, and terminology and apply the elements of music in a range of activities. They will also explore the function of music in society with reference to the self, communities, and cultures. Participation in Band is required for the performance part of this course.

*Prerequisite: None*

#### AMV20 (MUSIC – VOCAL/CHORAL, GRADE 10, OPEN)

This course emphasizes the creation and performance of music at a level consistent with previous experience. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of musical conventions, practices, and terminology and apply the elements of music in a range of activities. They will also explore the function of music in society with reference to the self, communities, and cultures. Participation in Choir is required for the performance part of this course.

*Prerequisite: None*

#### AMI3M (INSTRUMENTAL MUSIC - BAND, GRADE 11, UNIVERSITY/COLLEGE)

This course provides students with opportunities to develop their musical literacy through the creation, appreciation, analysis, and performance of music, including traditional, commercial, and art music. Students will apply the creative process when performing appropriate technical exercises and repertoire and will employ the critical analysis processes when reflecting on, responding to, and analysing live and recorded performances. Students will consider the function of music in society and the impact of music on individuals and communities. They will explore how to apply skills developed in music to their life and careers. Participation in Band is required for the performance part of this course.

*Prerequisite: Music, Grade 9 or 10, Open*

#### AMV3M (MUSIC – VOCAL/CHORAL, GRADE 11, UNIVERSITY/COLLEGE)

This course provides students with opportunities to develop their musical literacy through the creation, appreciation, analysis, and performance of music, including traditional, commercial, and art music. Students will apply the creative process when performing appropriate technical exercises and repertoire and will employ the critical analysis processes when reflecting on, responding to, and analysing live and recorded performances. Students will consider the function of music in society and the impact of music on individuals and communities. They will explore how to apply skills developed in music to their life and careers. Participation in Choir is required for the performance part of this course.

*Prerequisite: Music, Grade 9 or 10, Open*

#### AMI4M (INSTRUMENTAL MUSIC - BAND, GRADE 12, UNIVERSITY/COLLEGE)

This course enables students to enhance their musical literacy through the creation, appreciation, analysis, and performance of music. Students will perform traditional, commercial, and art music, and will respond with insight to live and recorded performances. Students will enhance their understanding of the function of music in society and the impact of music on themselves and various communities and cultures. Students will analyse how to apply skills developed in music to their life and careers. Participation in Band is required for the performance part of this course.

*Prerequisite: Music, Grade 11, University/College Preparation*

#### AMV4M (MUSIC – VOCAL/CHORAL, GRADE 12, UNIVERSITY/COLLEGE)

This course enables students to enhance their musical literacy through the creation, appreciation, analysis, and performance of music. Students will perform traditional, commercial, and art music, and will respond with insight to live and recorded performances. Students will enhance their understanding of the function of music in society and the impact of music on themselves and various communities and cultures. Students will analyse how to apply skills developed in music to their life and careers. Participation in Choir is required for the performance part of this course.

*Prerequisite: Music, Grade 11, University/College Preparation*

\*\*\* All music courses, credit and non-credit, carry additional charges. (See Financial Information.) Music credit may also be awarded for successful completion of Royal Conservatory of Music exams. Please see the Principal for details.



### **Business Studies**

#### BTT10 (INFORMATION AND COMMUNICATION TECHNOLOGY IN BUSINESS, GRADE 9, OPEN)

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*

#### BBI20 (INTRODUCTION TO BUSINESS, GRADE 10, OPEN)

This course introduces students to the world of business. Students will develop an understanding of the functions of business, including accounting, marketing, information and communication technology, human resources, and production, and of the importance of ethics and social responsibility. This course builds a foundation for further studies in business and helps students develop the business knowledge and skills they will need in their everyday lives.

*Prerequisite: None*

#### BAF3M (FINANCIAL ACCOUNTING FUNDAMENTALS, GRADE 11, UNIVERSITY/COLLEGE)

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*

#### BMI3C (MARKETING: GOODS, SERVICES, EVENTS, GRADE 11, COLLEGE)

This course introduces the fundamental concepts of product marketing, which includes the marketing of goods, services, and events. Students will examine how trends, issues, global economic changes, and information technology influence consumer buying habits. Students will engage in marketing research, develop marketing strategies, and produce a marketing plan for a product of their choice.

*Prerequisite: None*

#### BAT4M (FINANCIAL ACCOUNTING PRINCIPLES, GRADE 12, UNIVERSITY/COLLEGE)

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*

#### BBB4M (INTERNATIONAL BUSINESS FUNDAMENTALS, GRADE 12, UNIVERSITY/COLLEGE)

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*



### Canadian and World Studies

#### CGC1D (ISSUES IN CANADIAN GEOGRAPHY, GRADE 9, ACADEMIC)

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 to live.

*Prerequisite: None*

#### CGC1P (ISSUES IN CANADIAN GEOGRAPHY, GRADE 9, APPLIED)

This course focuses on current geographic issues that affect Canadians. Students will draw on their personal and everyday experiences as they explore a range of issues, including food and water supplies, competing land uses, and interactions with the natural environment, developing their awareness that issues that affect their lives are interconnected with issues in other parts of the world. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate choices related to sustainable living in Canada.

*Prerequisite: None*

#### CHC2D (CANADIAN HISTORY SINCE WORLD WAR I, GRADE 10, ACADEMIC)

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*

#### CHC2P (CANADIAN HISTORY SINCE WORLD WAR I, GRADE 10, APPLIED)

This course focuses on the social context of historical developments and events and how they have affected the lives of people in Canada since 1914. Students will explore interactions between various communities in Canada as well as contributions of individuals and groups to Canadian heritage and identity. Students 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 the continuing relevance of historical developments and how they have helped shape communities in present-day Canada.

*Prerequisite: None*

#### CHV2O (CIVICS AND CITIZENSHIP, GRADE 10, OPEN)

This course explores rights and responsibilities associated with being an active citizen in a democratic society. Students will explore issues of civic importance such as healthy schools, community planning, environmental responsibility, and the influence of social media, while developing their understanding of the role of civic engagement and of political processes in the local, national, and/or global community. Students will apply the concepts of political thinking and the political inquiry process to investigate, and express informed opinions about, a range of political issues and developments that are both of significance in today's world and of personal interest to them.

*Prerequisite: None*

#### CHA3U (AMERICAN HISTORY, GRADE 11, UNIVERSITY)

This course traces the social, economic, and political development of the United States from colonial times to the present. Students will explore the historical context of key developments that shaped the United States, its identity and culture, and its role in the global community. They will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating forces in American history.

*Prerequisite: Canadian History Since World War I, Grade 10, Academic or Applied*

#### CLN4U (CANADIAN AND INTERNATIONAL LAW, GRADE 12, UNIVERSITY)

This course explores a range of contemporary legal issues and how they are addressed in both Canadian and international law. Students will develop their understanding of the principles of Canadian and international law when exploring rights and freedoms within the context of topics such as religion, security, cyberspace, immigration, crimes against humanity, and environmental protection. Students will apply the concepts of legal thinking and the legal inquiry process when investigating these issues in both Canadian and international contexts, and they will develop legal reasoning skills and an understanding of conflict resolution in the area of international law.

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

#### CHY4U (WORLD HISTORY SINCE THE FIFTEENTH CENTURY, GRADE 12, UNIVERSITY)

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 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*



### **English/English as a Second Language**

#### ENG1D (ENGLISH, GRADE 9, ACADEMIC)

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 analyze 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*

#### ENG1P (ENGLISH, GRADE 9, APPLIED)

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*

#### ENG2D (ENGLISH, GRADE 10, ACADEMIC)

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 analyze 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: English, Grade 9, Academic or Applied*

#### ENG2P (ENGLISH, GRADE 10, APPLIED)

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: English, Grade 9, Academic or Applied*

#### ENG3U (ENGLISH, GRADE 11, UNIVERSITY)

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze 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: English, Grade 10, Academic*

#### ENG3C (ENGLISH, GRADE 11, COLLEGE)

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: English, Grade 10, Applied*

#### ENG4U (ENGLISH, GRADE 12, UNIVERSITY)

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 analyze 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: English, Grade 11, University Preparation*

#### ENG4C (ENGLISH, GRADE 12, COLLEGE)

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze 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: English, Grade 11, College Preparation*

#### ETS4U (STUDIES IN LITERATURE, GRADE 12, UNIVERSITY)

This course is for students with a special interest in literature and literary criticism. The course may focus on themes, genres, time periods, or countries. Students will analyze a range of forms and stylistic elements of literary texts and respond personally, critically, and creatively to them. They will also assess critical interpretations, write analytical essays, and complete an independent study project.

*Prerequisite: English, Grade 11, University Preparation*

#### EWC4U (THE WRITER'S CRAFT, GRADE 12, UNIVERSITY)

This course emphasizes knowledge and skills related to the craft of writing. Students will analyze 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: English, Grade 11, University Preparation*

#### ESLBO (ENGLISH AS A SECOND LANGUAGE, ESL LEVEL 2, OPEN)

This course extends students' listening, speaking, reading, and writing skills in English for everyday and academic purposes. Students will participate in conversations in structured situations on a variety of familiar and new topics; read a variety of texts designed or adapted for English language learners; expand their knowledge of English grammatical structures and sentence patterns; and link English sentences to compose paragraphs. The course also supports students' continuing adaptation to the Ontario school system by expanding their knowledge of diversity in their new province and country.

*Prerequisite: ESL Level 1 or equivalent*

#### ESLCO (ENGLISH AS A SECOND LANGUAGE, ESL LEVEL 3, OPEN)

This course further extends students' skills in listening, speaking, reading, and writing in English for a variety of everyday and academic purposes. Students will make short classroom oral presentations; read a variety of adapted and original texts in English; and write using a variety of text forms. As well, students will expand their academic vocabulary and their study skills to facilitate their transition to the mainstream school program. This course also introduces students to the rights and responsibilities inherent in Canadian citizenship, and to a variety of current Canadian issues.

*Prerequisite: ESL Level 2 or equivalent*

#### ESLDO (ENGLISH AS A SECOND LANGUAGE, ESL LEVEL 4, OPEN)

This course prepares students to use English with increasing fluency and accuracy in classroom and social situations and to participate in Canadian society as informed citizens. Students will develop the oral-presentation, reading, and writing skills required for success in all school subjects. They will extend listening and speaking skills through participation in discussions and

seminars; study and interpret a variety of grade-level texts; write narratives, articles, and summaries in English; and respond critically to a variety of print and media texts.

*Prerequisite: ESL Level 3 or equivalent*



## French as a Second Language

### FSF1D (CORE FRENCH, GRADE 9, ACADEMIC)

This course provides opportunities for students to communicate and interact in French with increasing independence, with a focus on familiar topics related to their daily lives. Students will develop their skills in listening, speaking, reading, and writing by using language learning strategies introduced in the elementary Core French program, and will apply creative and critical thinking skills in various ways. They will also enhance their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

*Prerequisite: Minimum of 600 hours of French instruction, or equivalent*

### FSF1P (CORE FRENCH, GRADE 9, APPLIED)

This course provides opportunities for students to communicate and interact in French in structured situations, with a focus on everyday topics, and to apply their knowledge of French in everyday situations. Students will develop listening, speaking, reading, and writing skills introduced in the elementary Core French program, through practical applications and concrete examples, and will use creative and critical thinking skills in various ways. They will also enhance their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

*Prerequisite: Minimum of 600 hours of French instruction, or equivalent*

### FSF2D (CORE FRENCH, GRADE 10, ACADEMIC)

This course provides opportunities for students to communicate in French about personally relevant, familiar, and academic topics in real-life situations with increasing independence. Students will exchange information, ideas, and opinions with others in guided and increasingly spontaneous spoken interactions. Students will develop their skills in listening, speaking, reading, and writing through the selective use of strategies that contribute to effective communication. They will also increase their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

*Prerequisite: Core French, Grade 9, Academic or Applied*

### FSF3U (CORE FRENCH, GRADE 11, UNIVERSITY)

This course offers students extended opportunities to speak and interact in real-life situations in French with greater independence. Students will develop their listening, speaking, reading, and writing skills, as well as their creative and critical thinking skills, through responding to and exploring a variety of oral and written texts. They will also broaden their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

*Prerequisite: Core French, Grade 10, Academic*



## Guidance and Career Education

### GLC2O (CAREER STUDIES, GRADE 10, OPEN)

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

### PPL1OF (FEMALE) (HEALTHY ACTIVE LIVING EDUC., GR. 9, OPEN)

### PPL1OM (MALE) (HEALTHY ACTIVE LIVING EDUC., GR. 9, OPEN)

This course equips students with the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities, students develop knowledge and skills related to movement competence and personal fitness that provide a foundation for active living. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the

world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.

*Prerequisite: None*

#### PPL20 (HEALTHY ACTIVE LIVING EDUCATION, GRADE 10, OPEN)

This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities, students develop knowledge and skills related to movement competence and personal fitness that provide a foundation for active living. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.

*Prerequisite: None*

#### PPL30 (HEALTHY ACTIVE LIVING EDUCATION, GRADE 11, OPEN)

This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities and exposure to a broader range of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.

*Prerequisite: None*

#### PPL40 (HEALTHY ACTIVE LIVING EDUCATION, GRADE 12, OPEN)

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 participation in a wide range of physical activities in a variety of settings, students can enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.

*Prerequisite: None*

#### AERIALS--ACROBATIC EDUCATION

This **non-credit course** focuses on acrosport, gymnastics, aerobics, group dynamics, weight training, balance, vaulting, movement, and choreography. It features work with floor mats, vaulting box, chairs, and human pyramids. Membership is by audition only.



## Mathematics

#### MPM1D (PRINCIPLES OF MATHEMATICS, GRADE 9, ACADEMIC)

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*

#### MFM1P (FOUNDATIONS OF MATHEMATICS, GRADE 9, APPLIED)

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*

#### MPM2D (PRINCIPLES OF MATHEMATICS, GRADE 10, ACADEMIC)

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: Principles of Mathematics, Grade 9, Academic*

#### MFM2P (FOUNDATIONS OF MATHEMATICS, GRADE 10, APPLIED)

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: Principles of Mathematics, Grade 9, Academic, or Foundations of Mathematics, Grade 9, Applied*

#### MCR3U (FUNCTIONS, GR. 11, UNIVERSITY)

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*

#### MBF3C (FOUNDATIONS FOR COLLEGE MATHEMATICS, GRADE 11, COLLEGE)

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*

#### MHF4U (ADVANCED FUNCTIONS, GRADE 12, UNIVERSITY)

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*

#### MCV4U (CALCULUS AND VECTORS, GRADE 12, UNIVERSITY)

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.

*Note: The new Advanced Functions course (MHF4U) must be taken prior to or concurrently with Calculus and Vectors (MCV4U).*

#### MAP4C (FOUNDATIONS FOR COLLEGE MATHEMATICS, GRADE 12, COLLEGE)

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*





## Religious Education

### HRE13 (RELIGIOUS EDUCATION, GRADE 9, LOCALLY DEVELOPED)

This course begins with a study of the historical development of the Bible and its reliability. Lessons then cover God's gifts of the Sabbath and salvation, the experiences and relationships within selected families in the Old Testament, and the application of biblical principles to one's family today.

*Prerequisite: None*

### HRE23 (RELIGIOUS EDUCATION, GRADE 10, LOCALLY DEVELOPED)

This course introduces students to: 1) the history of God's people from the Exodus through the period between the Old and New Testaments; 2) the development of the New Testament church; 3) the history of the Church from A.D. 70 to the early 1800's; and 4) the Millerite movement in the early 1800's through the development and growth of the Seventh-day Adventist church up to the present time.

*Prerequisite: None*

### HRE33 (RELIGIOUS EDUCATION, GRADE 11, LOCALLY DEVELOPED)

This course comprises four main units: The Letter to the Hebrews, Marriage and Family, Worldviews and Religion, and the Gospel of John. The course begins with a Christ-centred study of the book of Hebrews, followed by a study of biblical principles of relationships and their application to marriage and family life. The third unit provides the students with an introductory study of worldviews, religious movements, contemporary denominations, cults and world religions, as viewed from a biblical perspective, and concludes with a devotional study of the life and teachings of Jesus as viewed through the eyes of John. This course will seek to provide impetus for spiritual growth and witnessing.

*Prerequisite: None*

### HRE43 (RELIGIOUS EDUCATION, GRADE 12, LOCALLY DEVELOPED)

This course focuses on the study of the books of Daniel, Revelation, and Romans and their implications for the times in which we live. Supporting units may include Friendships and Choices and Challenges.

*Prerequisite: None*



## Science

### SNC1D (SCIENCE, GRADE 9, ACADEMIC)

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*

### SNC1P (SCIENCE, GRADE 9, APPLIED)

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*

### SNC2D (SCIENCE, GRADE 10, ACADEMIC)

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: Science, Grade 9, Academic or Applied*

### SNC2P (SCIENCE, GRADE 10, APPLIED)

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: Science, Grade 9, Academic or Applied*

#### SBI3U (BIOLOGY, GRADE 11, UNIVERSITY)

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: Science, Grade 10, Academic*

#### SCH3U (CHEMISTRY, GRADE 11, UNIVERSITY)

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: Science, Grade 10, Academic*

#### SPH3U (PHYSICS, GRADE 11, UNIVERSITY)

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: Science, Grade 10, Academic*

#### SBI4U (BIOLOGY, GRADE 12, UNIVERSITY)

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: Biology, Grade 11, University Preparation*

#### SCH4U (CHEMISTRY, GRADE 12 UNIVERSITY)

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: Chemistry, Grade 11, University Preparation*

#### SPH4U (PHYSICS, GRADE 12, UNIVERSITY)

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: Physics, Grade 11, University Preparation*



### **Social Sciences and Humanities**

#### HFN2O (FOOD AND NUTRITION, GRADE 10, OPEN)

This course focuses on guidelines for making nutritious food choices. Students will investigate factors that influence food choices, including beliefs, attitudes, current trends, traditional eating patterns, food marketing strategies, and individual needs. Students will also explore the environmental impact of a variety of food choices at the local and global level. The course provides students with opportunities to develop food-preparation skills and introduces them to the use of social science research methods in the area of food and nutrition.

*Prerequisite: None*

### HSP3U (INTRODUCTION TO ANTHROPOLOGY, PSYCHOLOGY, AND SOCIOLOGY, GRADE 11, UNIVERSITY)

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)*

### HHS4U (INDIVIDUALS AND FAMILIES IN A DIVERSE SOCIETY, GRADE 12, UNIVERSITY)

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*



## **Technological Education**

### TEJ3M (COMPUTER ENGINEERING TECHNOLOGY, GRADE 11 UNIVERSITY/COLLEGE)

This course examines computer systems and control of external devices. Students will assemble computers and small networks by installing and configuring appropriate hardware and software. Students will develop knowledge and skills in electronics, robotics, programming, and networks, and will build systems that use computer programs and interfaces to control and/or respond to external devices. Students will develop an awareness of related environmental and societal issues, and will learn about college and university programs leading to careers in computer technology.

*Prerequisite: None*