

**AWN4M1, Grade 12 – Visual Arts - Painting (College/University)**

**Prerequisite:** Visual Arts (AVI3M1)

This course focuses on the refinement of skills and knowledge in painting art works. Students will analyse art forms; use theories of art in analysing and producing art; and increase their understanding of stylistic changes in modern and contemporary Western art, Canadian (including Native Canadian) art, and art forms from various parts of the world. Students will produce a body of work demonstrating a personal approach.

**BTX4E1, Grade 12 - Information and Communication Technology in the Workplace (Workplace Preparation)**

**Prerequisite:** Information and Communication Technology: The Digital Environment, Grade 11, Open

This course provides students with the opportunity to further develop essential workplace skills in information and communication technology while working in a team environment. Using a project-based approach, students will focus on integrating software applications and applying multimedia software features. Students will expand their understanding of electronic business and e-commerce environments and workplace ethics. This course will prepare students for a successful transition from secondary school to the workplace.

**CGG 301, Grade 11 – Geography: Travel and Tourism-A Regional Geographic Perspective (Open)**

**Prerequisite:** Geography of Canada, Grade 9, Academic or Applied

This course focuses on travel and tourism as the vehicle for studying selected world regions. Using a variety of geotechnologies and inquiry and communication methods, students will conduct and present case studies that develop their understanding of the unique characteristics of selected world regions; the environmental, cultural, economic, and political factors that influence travel and tourism; and the impact of the travel industry on communities and environments around the world.

**CHV 209, Grade 10 - Civics (Open) 0.5 credit**

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.

**ENG 4C1, Grade 12 – English (College Preparation)**

**Prerequisite:** English, Grade 11, College Preparation

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.

**ENG 4U1, Grade 12 – English (University Preparation)**

**Prerequisite:** English, Grade 11, University Preparation

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.

### **OLC 401, Grade 12 –Ontario Secondary School Literacy Course (Open)**

This course is designed to help students acquire and demonstrate the cross-curricular literacy skills that are evaluated by the Ontario Secondary School Literacy Test (OSSLT). Students who complete the course successfully will meet the provincial literacy requirement for graduation. Students will read a variety of informational, narrative, and graphic texts and will produce a variety of forms of writing, including summaries, information paragraphs, opinion pieces, and news reports. Students will also maintain and manage a portfolio containing a record of their reading experiences and samples of their writing.

**Eligibility requirement:** Students who have been eligible to write the OSSLT at least twice and who have been unsuccessful at least once are eligible to take the course. (Students who have already met the literacy requirement for graduation may be eligible to take the course under special circumstances, at the discretion of the principal.)

### **GLC 209, Grade 10 – Career Studies (Open) 0.5 credit**

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.

### **HHS 4M1, Grade 12 - Individuals and Families in a Diverse Society (University/College)**

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

This course applies current theories and research from the disciplines of anthropology, psychology, and sociology to the study of individual development, family behaviour, intimate and parent–child relationships, and the ways in which families interact within the diverse Canadian society. Students will learn the interpersonal skills required to contribute to the well-being of families, and the investigative skills required to conduct and evaluate research about individuals and families.

### **MCT4C1, Grade 12 - Mathematics for College Technology (College Preparation)**

**Prerequisites:** Grade 11 Mixed Math

This course enables students to extend their knowledge of functions. Students will investigate and apply properties of polynomial, exponential, and trigonometric functions; continue to represent functions numerically, graphically, and algebraically; develop facility in simplifying expressions and solving equations; and solve problems that address applications of algebra, trigonometry, vectors, and geometry. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for a variety of college technology programs.

### **MCV4U1, Grade 12 - Calculus and Vectors (University Preparation)**

**Prerequisites:** Grade 12 Advanced Functions

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, rational, exponential, and sinusoidal 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 plan to study mathematics in university and who may choose to pursue careers in fields such as physics and engineering. Note: The new Advanced Functions must be taken concurrently with or must precede Calculus and Vectors.

## **MDM4U1, Grade 12 - Mathematics of Data Management (University Preparation)**

**Prerequisites:** Grade 11 Mixed or University Math

This course broadens students' understanding of mathematics as it relates to managing information. Students will apply methods for organizing large amounts of information; apply counting techniques, probability, and statistics in modelling and solving problems; and carry out a culminating project that integrates the expectations of the course and encourages perseverance and independence. Students planning to pursue university programs in business, the social sciences, or the humanities will find this course of particular interest.

## **MHF4U1, Grade 12 - Advanced Functions (University Preparation)**

**Prerequisites:** Grade 11 University Math

This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric 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 who plan to study mathematics in university and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs.

## **HRT3MU, Grade 11 - Religious Education: Faith and Culture: World Religions, Beliefs, Issues and Religious Traditions (University/College) Upgrade**

**Prerequisite:** HRT3M1

World Religions introduces students to the various expressions and responses to humanity's encounter with mystery in our quest for life's meaning. The course explores the life wisdom found in the responses of the major faith traditions to the compelling questions concerning the spiritual dimension of human experience, self-understanding, and the role of the individual within the family. In the Family Life Education strand, students explore a variety of topics related to the themes of personhood, family relationships, and sexuality. Its purpose is to familiarize students with the language of religious discourse and to develop their awareness of the place and function of religion in human culture. This exploration can lead students to a more authentic adherence to their religious tradition and a deeper commitment to the Catholic faith. It can help to break down prejudices and misconceptions about other religious traditions and, at the same time, strengthen and affirm the students' own search for answers to life's meaning. This course enables students to discover what others believe and how they live, and to appreciate their own unique heritage. Students will learn about the teachings and traditions of a variety of religions, the connections between religions and the development of civilizations, the place and function of religion in human experience, and the influence of a broad range of religions on contemporary society. This course also introduces students to skills used in researching and investigating world religions.

## **HRF 3OU, Grade 11 – Religious Education: Faith and Culture, Beliefs and Daily Life (Open) Upgrade**

**Prerequisite:** HRF3O1

This course introduces students to the beliefs, traditions and practices of the Great Religions of the world. Students will examine how systems of belief affect individual and communal life and social relationships. They will examine the ways in which people have expressed their beliefs through their respective sacred language, ritual and worship. While focussing on the faith journey of the Catholic and other Christian communities throughout the ages, students will also learn about the Church's interaction with other religions, particularly, Judaism, Islam and the Spiritual traditions of Canada's Native People. This course will enable students to appreciate further their own unique Catholic heritage and will help break down prejudice about other religions. In the Family Life Education strand, students explore a variety of topics related to the themes of personhood, family relationships and sexuality.

## **HRE4OU, Grade 12 - Religious Education: Church and Culture (Open) Upgrade**

**Prerequisite:** HRE4O1

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.

## **HRE 4MU, Grade 12 - Religious Education: Church and Culture, In Search of the Good (University/College) Upgrade**

**Prerequisite:** HRE4M1

This course is a component of the Catholic Leadership Interdisciplinary Program [CLIP]. This course assists students to develop the knowledge and skills necessary to live lives of full maturity. In order to achieve this goal, the Grade 12 Religious Education program will focus on the need for young women and men to understand themselves as moral persons, living the Way of Christ. Young people will be invited to explore Christian ethics, the revelation of Sacred Scripture and the experience and teaching of the Catholic Church. Students will also become familiar with the Social Teaching of the Church and learn the fundamental, social principles that will help them to contribute to the building of God's kingdom on earth. In the Family Life Education strand, students explore a variety of topics related to the themes of personhood, interpersonal relationships and sexuality.

## **SBI4U1, Grade 12 - Biology, (University Preparation)**

**Prerequisite:** Biology, Grade 11, University Preparation

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.

## **SCH4U1, Grade 12 - Chemistry, (University Preparation)**

**Prerequisite:** Chemistry, Grade 11, University Preparation

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.

## **SPH4C1, Grade 12 - Physics, (College Preparation)**

**Prerequisite:** Science, Grade 10, Academic or Applied

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.