

## AN EXPLANATION OF THE COURSE CODING SYSTEM

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The first three characters of the course codes are those given in the Ministry of Education's list of common course codes.

The fourth character indicates the grade of a course, as follows: 1 (grade 9), 2 (grade 10), 3 (grade 11), and 4 (grade 12).

The fifth character indicates the type of course, as follows: D (academic) P (applied), O (open), E (workplace preparation), C (college preparation), U (university preparation), M (university/college preparation), and T (transfer).

## NON-CREDIT COURSES

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### TUTORIAL:

Tutorial instruction is available daily during school hours or by appointment to offer students remedial instruction in oral, aural, and written English.

### INTENSIVE ENGLISH:

This course is designed for the student who presents with limited or no language acquisition. The aims and objectives of this class are to provide students with an intensive introduction to practical aspects of the English language, including vocabulary, syntax and the conventions of idioms.

## CREDIT COURSES:

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## ESL ENGLISH AS A SECOND LANGUAGE

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### ESL AO      ENGLISH AS A SECOND LANGUAGE LEVEL 1, OPEN

This course builds on students' previous education and language knowledge to introduce them to the English language and help them adjust to the diversity in their new environment. Students will use beginning English language skills in listening, speaking, reading, and writing for everyday and essential academic purposes. They will engage in short conversations using Basic English language structures and simple sentence patterns; read short adapted texts; and write phrases and short sentences. The course also provides students with the knowledge and skills they need to begin to adapt to their new lives in Canada.

Prerequisite: None

## ESL BO ENGLISH AS A SECOND LANGUAGE 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 AO or equivalent

## ESL CO ENGLISH AS A SECOND LANGUAGE 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 also 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 BO or equivalent

## ESL DO ENGLISH AS A SECOND LANGUAGE 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.

**\*Successful completion of this credit is a prerequisite for grades 9 and 10 English programs.**

**Prerequisite:** ESL CO or equivalent

## ESL EO ENGLISH AS A SECOND LANGUAGE LEVEL 5, OPEN

This course provides students with the skills and strategies they need to make the transition to college and university preparation courses in English and other secondary school disciplines. Students will be encouraged to develop independence in a range of academic tasks. They will participate in debates and lead classroom workshops; read and interpret literary works and academic texts; write essays, narratives, and reports; and apply a range of learning strategies and research skills effectively. Students will further develop their ability to respond critically to print and media texts.

**\*\* Successful completion of this credit is a prerequisite for grades 11 and 12 English programs**

**Prerequisite:** ESL DO or equivalent

## GRADES 9 & 10 OR FIRST AND SECOND LEVEL

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### **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 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 \*where applicable successful completion ESL DO/ESL EO

### **MPM1D PRINCIPALS 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 different 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

### **CGC1D GEOGRAPHY OF CANADA, 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 in which to live.

**Prerequisite:** None

### **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

## **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 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:** English Grade 9, Academic or applied.

\*\*where applicable successful completion of ESL DO/ESL EO

## **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:** Mathematics 9, Academic, or Grade 9 Mathematics Transfer, Applied to Academic

## **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. Student will develop food-preparation skills and learn the use of social science research methods in the area of food and nutrition.

**Prerequisite:** None

## **HIF10/20D INDIVIDUAL AND FAMILY LIVING, GRADE 9 OR 10 OPEN**

This course explores the challenges faced by all people: how to meet basic needs, how to relate to others, how to manage resources and how to become responsible members of society. Students will acquire knowledge and skills that are needed to make the transition to adulthood. Teachers will instruct students in developing interpersonal, decision-making, and practical skills related to daily life. Students will explore the functioning of families and the diversities found among families and within society.

**Prerequisite:** None

**ADA20****DRAMA, GRADE 10, OPEN**

This course provides opportunities for students to explore dramatic forms and techniques. Students will explore a variety of dramatic sources from various cultures and representing a range of genres. Students will use the elements of drama in creating and communicating through dramatic works. Students will assume responsibility for decisions made in the creative and collaborative processes and will reflect on their experiences.

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

**CHC2D****CANADIAN HISTORY SINCE WORLD WAR 1, 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

**GLC20****CAREER STUDIES .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.

Prerequisite: None

**CVH20****CIVICS .5 CREDIT**

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. They will apply the concepts of political thinking and the political inquiry process to investigate, and express opinions about a range of issues.

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

## **PPL2O HEALTHY ACTIVE LIVING EDUCATION, GRADE 10, OPEN**

This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Student learning will include the application of movement principles to refine skills; participation in a variety of activities that enhance personal competence, fitness, and health; examination of issues related to healthy sexuality, healthy eating, substance use and abuse; and the use of informed decision-making, conflict resolution, and social skills in making personal choices.

Prerequisite: None

## **GRADE 11 OR THIRD LEVEL**

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### **CHW3M WORLD HISTORY TO END OF THE FIFTEENTH CENTURY, GRADE 11, UNIVERSITY/COLLEGE**

This course explores the history of various societies and civilizations around the world, from earliest times to around 1500 CE. Students will investigate a range of factors that contributed to the rise, success, and decline of various ancient and pre-modern societies throughout the world and will examine life in and the cultural and political legacy of these societies. Students 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 social, political, and economic structures and historical forces at work in various societies and in different historical eras.

Prerequisite: Grade 10 Canadian History, Academic or Applied

### **ICS3U INTRODUCTION TO COMPUTER SCIENCE, GRADE 11, UNIVERSITY**

This course introduces students to computer science. Students will design software independently and as part of a team, using industry-standard programming tools and applying the software development life-cycle model. They will also write and use subprograms within computer programs. Students will develop creative solutions for various types of problems as their understanding of the computing environment grows. They will also explore environmental and ergonomic issues, emerging research in computer science, and global career trends in computer related fields.

**Prerequisite:** None

### **SPH 3U PHYSICS, GRADE 11, UNIVERSITY PREPARATION**

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

### **SCH 3U CHEMISTRY, GRADE 11, UNIVERSITY PREPARATION**

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 behavior of bases. 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

### **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

## **SB13U**      **BIOLOGY, GRADE 11, UNIVERSITY PREPARATION**

This course furthers students' understanding of the processes involved 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

## **HZB3M**      **PHILOSOPHY: THE BIG QUESTIONS, GRADE 11, UNIVERSITY/COLLEGE**

This course encourages exploration of philosophy's big questions, such as: What is a meaningful life? What separates right from wrong? What constitutes knowledge? What makes something beautiful? What is a just society? Students will develop critical thinking and philosophical reasoning skills as they identify and analyse the responses of philosophers to the big questions and formulate their own responses to them. Students will explore the relevance of philosophical questions to society and to their everyday life. They will develop research and inquiry skills as they investigate various topics in philosophy.

**Prerequisite:** None

## **TGJ3M**      **COMMUNICATIONS TECHNOLOGY, GRADE 11, UNIVERSITY/COLLEGE**

This course enables students to develop knowledge and skills in the areas of graphic communication, printing and publishing, audio and video production and broadcast journalism. Students will work both independently and as part of a production team to design and produce media products in a project-driven environment. Practical projects may include the making of signs, yearbooks, video and/or audio productions, newscasts and documentaries. Students will also develop an awareness of related environmental and societal issues, and will explore secondary and postsecondary education and training pathways and career opportunities in the various communications fields.

**Prerequisite:** None

## **ENG 3U**      **ENGLISH, GRADE 11, UNIVERSITY PREPARATION**

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:** English, Grade 10, Academic, \*\*where applicable ESL EO



### **MCR 3U MATH, GRADE 11, UNIVERSITY PREPARATION**

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

### **CIE3M THE INDIVIDUAL AND THE ECONOMY, GRADE 11, UNIVERSITY/COLLEGE**

This course explores issues and challenges facing the Canadian economy as well as the implications of various responses to them. Students will explore the economic role of firms, workers, and government as well as their own role as individual consumers and contributors, and how all of these roles contribute to stability and change in the Canadian economy. Students will apply the concepts of economic thinking and the economic inquiry process, including economic models, to investigate the impact of economic issues and decisions at the individual, regional, and national level.

**Prerequisite:** Canadian History, Grade 10, Academic or applied

### **PPZ3C HEALTH FOR LIFE, GRADE 11, OPEN**

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

### **BMI3C MARKETING: GOODS, SERVICES, EVENTS, GRADE 11, COLLEGE**

This course introduces the fundamental concepts of product marketing, which include 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

## GRADE 12 OR FOURTH LEVEL

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### **ENG 4C ENGLISH GRADE 12, 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.

**Prerequisite:** English, Grade11, College Preparation

### **ENG 4U ENGLISH, GRADE 12, 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 work place.

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

\*\*where applicable ESL EO

### **BOH4M BUSINESS LEADERSHIP: MANAGEMENT FUNDAMENTALS, GRADE 12, U/C**

This course focuses on the development of leadership skills used in managing a successful business. Students will analyse the role of a leader in business, with a focus on decision making, management of group dynamics, workplace stress and conflict, motivation of employees, and planning. Effective business communication skills, ethics, and social responsibility are also emphasized.

**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

## **OLC40 ONTARIO LITERACY COURSE, GRADE 12**

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. As of 2004, principals may determine that a student may enroll in the course before he or she has had a second opportunity to take the OSSLT, if it is in the best educational interests of the student. Further, as of 2009, mature students may enroll in the course without having attempted and failed the OSSLT.

## **ICS4U COMPUTER SCIENCE, GRADE 12, UNIVERSITY PREPARATION**

This course enables students to further develop knowledge and skills in computer science. Students will use modular design principles to create complex and fully documented programs, according to industry standards. Student teams will manage a large software development project, from planning through to project review. Students will also analyse algorithms for effectiveness. They will investigate ethical issues in computing and further explore environmental issues, emerging technologies, areas of research in computer science, and careers in the field.

**Prerequisite:** Introduction to Computer Science, Grade 11, University preparation

## **TGJ4M COMMUNICATIONS TECHNOLOGY, GRADE 12, UNIVERSITY/COLLEGE**

This course enables students to further develop media knowledge and skills while designing and producing projects in the areas of live recorded and graphic communications. Students may work in the areas of TV, video, and movie production; radio and audio production; print and graphic communications; photography; digital imaging; broadcast journalism; and interactive news media. Students will also expand their awareness of environmental and societal issues related to communications technology, and will investigate career opportunities and challenges in a rapidly changing technological environment.

Prerequisite: Communications Technology, Grade 11, University/College

#### **SCH4U CHEMISTRY, GRADE 12, UNIVERSITY PREPARATION**

This course enables students to deepen their understanding of chemistry through the study of organic chemistry, energy changes and rates of reaction, chemical systems and equilibrium, electrochemistry, and atomic and molecular structure. Students will further develop problem-solving and laboratory skills as they investigate chemical processes, at the same time refining their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in daily life, and on evaluating the impact of chemical technology on the environment.

Prerequisite: Chemistry Grade 11, University Preparation

#### **SPH 4U PHYSICS, GRADE 12, UNIVERSITY PREPARATION**

This course enables students to deepen their understanding of physics concepts and theories. Students will continue their exploration of energy transformation 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.

#### **SBI4U BIOLOGY, GRADE 12, 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.

Prerequisite: Biology, Grade 11, University Preparation

#### **CIA4U ANALYZING CURRENT ECONOMIC ISSUES, GRADE 12, UNIVERSITY PREP**

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.

#### **CGW4U WORLD ISSUES: A GEOGRAPHIC ANALYSIS, GRADE 12, UNIVERSITY PREP**

This course looks at the global challenge of creating a more sustainable and equitable world. Students will explore a range of issues involving environmental, economic, social and geopolitical interrelationships, and will examine governmental policies related to these issues. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate these complex issues, including their impact on natural and human communities around the world.

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

#### **CLN4U CANADIAN AND INTERNATIONAL LAW, GRADE 12, UNIVERSITY PREP**

This course explores a range of contemporary legal issues and how they are addressed in both Canadian and international law. Students will develop an understanding of the principles of Canadian and international law and of issues related to human rights and freedoms, conflict resolution, and criminal, environmental, and workplace law, both in Canada and internationally. Students will apply the concepts of legal thinking and the legal studies inquiry process, and will develop legal reasoning skills, when investigating these and other issues in both Canadian and international contexts.

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

#### **HHS 4U FAMILIES IN CANADA, GRADE 12, UNIVERSITY PREPARATION**

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 their research

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

#### **CHI4U CANADA: HISTORY, IDENTITY, AND CULTURE, GRADE 12, UNIVERSITY PREP**

This course traces the history of Canada, with a focus on the evolution of our national identity and culture as well as the identity and culture of various groups that make up Canada. Students will explore various developments and events, both national and international, from precontact to the present, and will examine various communities in Canada and how they have contributed to identity and heritage in Canada.

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

**PSK4U KINESIOLOGY, GRADE 12, UNIVERSITY PREPARATION**

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

**MDM4U MATHEMATICS OF DATA MANAGEMENT, GRADE 12, UNIVERSITY PREP**

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

**Prerequisite:** Grade 11. Functions and Relations University Preparation or Functions, Grade 11 University/College Preparations.

**MHF4U ADVANCED FUNCTIONS, GRADE 12, UNIVERSITY PREPARATION**

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.

**Prerequisite:** Functions, Grade 11, University Preparation, or Mathematics for College Technology, Grade 12, College Preparation.

**MCV4U CALCULUS AND VECTORS, GRADE 12, UNIVERSITY PREPARATION**

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 modeling 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).