

Course Code	Course Name	GRADE 12 Compulsory Course Descriptions
ENG4U	English	This course emphasizes the consolidation of the literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. An important focus will be on using academic language coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. The course is intended to prepare students for university, college, or the workplace. Prerequisite: English, Grade 11, University Preparation
Course Code	Course Name	GRADE 12 Optional Course Descriptions
EWC4U	Writer's Craft	This course emphasizes knowledge and skills related to the craft of writing. Students will analyse models of effective writing; use a workshop approach to produce a range of works; identify and use techniques required for specialized forms of writing; and identify effective ways to improve the quality of their writing. They will also complete a major paper as part of a creative or analytical independent study project and investigate opportunities for publication and for writing careers. Prerequisite: English, Grade 11, University Preparation
MHF4U	Mathematics: Advanced Functions	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
MCB4U	Mathematics: Calculus & Vectors	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: Advanced Functions (MHF4U) must be taken prior to or concurrently with Calculus and Vectors (MCV4U).
SBI4U	Biology	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	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	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
BBB4M	International Business Fundamentals	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.
HSB4M	Challenge & Change in Society	This course examines the theories and methodologies used in anthropology, psychology, and sociology to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour, and their impact on society. Students will analyse cultural, social, and biological patterns in human societies, looking at the ways in which those patterns change over time. Students will also explore the ideas of classical and contemporary social theorists, and will apply those ideas to the analysis of contemporary trends.
HHS4M	Individuals and Families in a Diverse Society	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. Prerequisite: Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies
HHG4M	Issues in Human Growth and Development	This course offers a multidisciplinary approach to the study of human development throughout the life cycle, with particular emphasis on enhancing growth and development. Students will examine how early brain and child development are linked to lifelong learning, health, and well-being, and will develop child-care and human-relationship skills through practical experience in a community setting. This course also refines students' skills used in researching and investigating issues related to human growth and development. Prerequisite: Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies
AVI4M	Visual Arts	This course focuses on the refinement of students' skills and knowledge in visual arts. 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. Prerequisite: Visual Arts, Grade 11, University/College Preparation or Open
CGR4M	Environment and Resource Management	This course investigates the complexity and fragility of ecosystems and the pressures human activities place on them. Students will examine ecological processes, the principles of sustainability, and strategies for resource management, with a focus on the challenges of environmental degradation and resource depletion. Students will use geo-technologies and skills of geographic inquiry to explain and evaluate various approaches to achieving a more sustainable relationship between people and their environment. Prerequisite: Any university, university/college, or college preparation course in Canadian and world studies, English, or social sciences and humanities

- Heritage Academy will offer all Compulsory courses. Heritage Academy will offer Optional Courses based on student interest.