



GRADE 12 COURSE OPTIONS 2017-2018

AMU4M	Music
<p>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.</p>	
CGR4M	The Environment & Resource Management
<p>This course investigates interactions between natural and human systems, with a particular emphasis on the impacts of human activity on ecosystems and natural processes. Students will use the geographic inquiry process, apply the concepts of geographic thinking, and employ a variety of spatial skills and technologies to analyse these impacts and propose ways of reducing them. In the course of their investigations, they will assess resource management and sustainability practices, as well as related government policies and international accords. They will also consider questions of individual responsibility and environmental stewardship as they explore ways of developing a more sustainable relationship with the environment.</p>	
CHY4U	World History since the 15 th Century
<p>This course traces major developments and events in world history since approximately 1450. Students will explore social, economic, and political changes, the historical roots of contemporary issues, and the role of conflict and cooperation in global interrelationships. They will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, as they investigate key issues and ideas and assess societal progress or decline in world history.</p>	
CLN4U	Canadian & International Law
<p>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.</p>	

ENG4U	English
<p>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 with coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. This course is intended to prepare students for university, college or the workplace.</p>	
EWC4U	The Writer's Craft
<p>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.</p>	
FIF4U	French Immersion
<p>This course provides students with extensive opportunities to communicate, interact, and think critically and creatively in French. Students will consolidate their listening, speaking, reading, and writing skills and apply language learning strategies while communicating about concrete and abstract topics, and will independently respond to and interact with a variety of oral and written texts. Students will study a selection of French literature from the Middle Ages to the present. They will also enrich their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.</p>	
HSP4U	Challenges & Changes in Society
<p>This course focuses on the use of social science theories, perspectives, and methodologies to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour and their impact on society. Students will critically analyze how and why cultural, social, and behavioural patterns change over time. They will explore the ideas of social theorists and use those ideas to analyze causes of and responses to challenges such as technological change, deviance, and global inequalities. Students will explore ways in which social science research methods can be used to study social change.</p>	
ICS4U	Computer Science
<p>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.</p>	

IDP4U	Interdisciplinary Studies
<p>This course will help students develop and consolidate the skills required for and knowledge of different subjects and disciplines to solve problems, make decisions, create personal meaning, and present findings beyond the scope of a single subject or discipline. Students will apply the principles and processes of inquiry and research to effectively use a range of print, electronic, and mass media resources; to analyse historical innovations and exemplary research; and to investigate real-life situations and career opportunities in interdisciplinary endeavours. They will also assess their own cognitive and affective strategies, apply general skills in both familiar and new contexts, create innovative products, and communicate new knowledge.</p>	
MCV4U	Calculus & Vectors
<p>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.</p>	
MHF4U	Advanced Functions
<p>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.</p>	
PLF4M	Recreation & Healthy Active Living Leadership
<p>This course enables students to explore the benefits of lifelong participation in active recreation and healthy leisure and to develop the leadership and coordinating skills needed to plan, organize, and safely implement recreational events and other activities related to healthy, active living. Students will also learn how to promote the benefits of healthy, active living to others through mentoring and assisting them in making informed decisions that enhance their well-being. The course will prepare students for university programs in physical education and health and kinesiology and for college and university programs in recreation and leisure management, fitness and health promotion, and fitness leadership.</p>	

SBI4U	Biology
<p>This course provides students with the opportunity for in-depth study of the concepts and processes associated with 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 achievement of the detailed knowledge and refinement of skills needed for further study in various branches of the life sciences and related fields.</p>	
SCH4U	Chemistry
<p>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.</p>	
SPH4U	Physics
<p>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.</p>	