Course Code	Course Name	Grade	Туре	Department	Description
AMU101	Music	9	Open	Art	This course emphasizes the creation and performance of music at a level consistent with previous experience and is aimed at developing technique, sensitivity, and imagination. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of reflective and analytical activities. Students will develop an understanding of the conventions and elements of music and of safe practices related to music and will develop a variety of skills transferable to other areas of their life.
AVI101	Visual Arts-Comprehensive	9	Open	Art	This course is exploratory in nature, offering an overview of visual arts as a foundation for further study. Students will become familiar with the elements and principles of design and the expressive qualities of various materials by using a range of media, processes, techniques, and styles. Students will use the creative and critical analysis processes and will interpret art within a personal, contemporary, and historical context.
BTT101	Information Communication Tech	9	Open	Business Studies	This hands-on 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 website design, desktop publishing, spreadsheet, presentation and word processing software 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. Students who take BTT10 are not allowed to take BTT20.
CGC1D1	Issues in Canadian Geography	9	Academic	Geography	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
CGC1P1	Issues in Canadian Geography	9	Applied	Geography	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
ENG1D1	English	9	Academic	English	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 analyse 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.

ENG1L1	English	9	Locally Developed	English	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 essential English course, which leads to college or workplace preparation courses in Grades 11 and 12.
ENG1P1	English	9	Applied	English	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.
ESLAO1	English as a Second Language	9	Open	English	This course builds on students' previous education and language knowledge to introduce the English language and help students adjust to their new cultural environment. Students will use beginning English language skills in listening, speaking, reading, and writing for everyday and essential academic purposes; use basic English language structures and simple sentence patterns in short conversations; 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.

ESLBO1	English as a Second Language	9	Open	English	This course builds on students' previous education and language knowledge to introduce the English language and help students adjust to their new cultural environment. Students will use beginning English language skills in listening, speaking, reading, and writing for everyday and essential academic purposes; use basic English language structures and simple sentence patterns in short conversations; 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.
ESLCO1	English as a Second Language	9	Open	English	This course extends students' skills in listening, speaking, reading, and writing in English for a variety of everyday and academic purposes. Students will make short classroom presentations; read a variety of adapted and original texts in English; and write using a variety of forms of text. Students will also expand their academic vocabulary and their study skills to facilitate the 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.
ESLDO1	English as a Second Language, Level	9	Open	English	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 reading, writing, and oral presentation skills required for success in all school subjects. They will study and interpret a variety of grade-level texts; extend listening and speaking skills through participation in discussions and seminars; write narratives, articles, and summaries in English; and respond critically to various print and media texts.

FSF1D1	Core French	9	Academic	French as a Second Language	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 continue to develop language knowledge and skills 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 the skills necessary to become life-long language learners. Prerequisite: Minimum of 600 hours of elementary Core French instruction, or equivalent
FSF1P1	Core French	9	Applied	French as a Second Language	This course provides opportunities for students to communicate and interact in French in structured situations on everyday topics and to apply their knowledge of French in everyday situations. Students will continue to develop language knowledge and 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 the skills necessary to become lifelong language learners. Prerequisite: Minimum of 600 hours of elementary Core French instruction, or equivalent
GLE1O1	Learning Strategies	9	Open	Guidance and Career Education	This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace and the community. The course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond.

GLS1O1	Learning Strategies	9	Open	Guidance and Career Education	This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace and the community. The course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond.
HRE1O1	Religious Education	9	Open	Religion	This course engages students in the examination of the Christian narrative as revealed in Sacred Scripture. Students are invited to a deeper understanding of both the joy and the demands of living out the call to discipleship as it is described in the Scriptures. Students explore discipleship as encountered in the Sacred Tradition of the Church (Sacraments, Liturgical Year and Church Teaching and Law), as part of their ongoing personal growth and faith understanding. Students explore Catholic rituals, teaching, practice, morals and values, and virtues to facilitate a healthy and covenantal relationship with self, God and with others. Using theological reflection, they are challenged to explore the connections and disconnections of ethical concepts (euthanasia, abortion, sexuality, etc.) between the Church and contemporary culture. The course focuses on encouraging students to know and love by following in the footsteps of Jesus. As they learn of his words and deeds, they discover the importance of prayerfully serving the community to bring about the Reign of God.

MAT1L1	Mathematics	9	Locally Developed	Mathematics	This course provides students who have experienced difficulties in previous mathematics courses an opportunity to obtain sufficient background and skill development to prepare them for Grade 11 and 12 Workplace Preparation courses. Whenever possible, ideas will be presented in a realistic context providing students with an opportunity to explore, organize, interpret, and use mathematical models to solve problems. Technology and manipulative materials will be used wherever appropriate.
MFM1P1	Foundations of Mathematics	9	Applied	Mathematics	This course enables students to develop 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 relationships and will determine the connections between the representations. They will also explore certain relationships that emerge from the measurement of three-dimensional objects and two-dimensional shapes. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. They will also explore certain relationships that emerge from the measurement of three-dimensional objects and two-dimensional shapes. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. Successful completion of this course prepares students for Foundations of Mathematics, Grade 10, App
MPM1D1	Principles of Mathematics	9	Academic	Mathematics	This course enables students to develop 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 relationship. They will also explore

					relationships that emerge from the measurement of three-dimensional objects and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multistep problems. Successful completion of this course prepares students for Principles of Mathematics, Grade 10, Academic (MPM2D) or Foundations of Mathematics, Grade 10, Applied (MFM2P). Learning through abstract reasoning is an important aspect of this course.
NAC1O1	Expressions of First Nations, Métis	9	Open	Native Studies	This course examines Aboriginal cultures in Canada through an exploration of art forms – painting, sculpture, storytelling, dance, and music – created by Aboriginal artists. Students will learn to identify Aboriginal art forms and describe relationships between the art forms and Aboriginal traditions, philosophy, and culture. Students will also create their own art forms to express their understanding of Aboriginal identity, relationships, and sovereignty
PAL1OT	Large Group Activities	9	Open	Physical Education	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. The emphasis of this course is on the sport of football skill development, leadership, refereeing, personal fitness and coaching strategies.

PPL1OF	Healthy Active Living Female	9	Open	Physical Education	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
PPL1OM	Healthy Active Living Male	9	Open	Physical Education	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
SNC1D1	Science	9	Academic	Science	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
SNC1L1	Science	9	Locally Developed	Science	This is an introductory course in science that will allow you to learn about the basic concepts involved in biology, chemistry, physics and scientific inquiry. Each of these topics explore a range of topics including life-sustaining processes in simple and complex organisms, properties of common materials, electrical circuits and science in daily life. The course is designed to help you develop your mathematical and scientific process skills and to continue developing your skills in reading, writing and oral language through practical and relevant science activities. You will be asked to design and conduct investigations related to the 4 topics of study allowing you to put your practical problem solving abilities to use and to apply your knowledge of science to everyday situations. This course will provide you with considerable knowledge in science and prepare you for the next level of study and success in everyday life. The course is intended to prepare students for the Grade 10 essential Science course, which leads to college or workplace preparation courses in Grades 11 and 12.
SNC1P1	Science	9	Applied	Science	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
TIJ101	Exploring Technologies	9	Open	Technological Education	This course enables students to further explore and develop technological knowledge and skills introduced in the elementary science and technology program. Students will be given the opportunity to design and create products and/or provide services related to the various technological areas or industries, working with a variety of tools, equipment, and software commonly used in industry. Students will develop an awareness of environmental and societal issues, and will begin to explore secondary and postsecondary education and training pathways leading to careers in technology-related fields.
TXJ101	Exploring Hairstyling and Aesth	9	Open	Technological Education	This exploratory course introduces students to concepts and skills related to hairstyling and aesthetics, including hair, nail, and skin care applications. Students will develop an awareness of related environmental and societal issues and will begin to explore secondary and postsecondary pathways leading to careers in the field.
ADA2O1	Drama	10	Open	Art	Course Outline: This course provides opportunities for students to explore dramatic forms, conventions, 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.

AMG2O1	Guitar Music	10	Open	Art	This course emphasizes performance of music at an intermediate level that strikes a balance between challenge and skill. Student learning will include participating in creative activities and listening perceptively. Students will also be required to develop a thorough understanding of the language of music, including the elements, terminology, and history. The focus of this course will be on Guitar.
ASM2O1	Media Arts	10	Open	Art	This course enables students to create media art works by exploring new media, emerging technologies such as digital animation, and a variety of traditional art forms such as film, photography, video, and visual arts. Students will acquire communication skills that are transferable beyond the media arts classroom and develop an understanding of responsible practices related to the creative process. Students will develop the skills necessary to create and interpret media art works.
AMU2O1	Music	10	Open	Art	Course Outline: 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 reflective and analytical activities. Students will develop their understanding 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.
AMV2O1	Music: Vocal/Choral	10	Open	Art	This course emphasizes performance of music at an intermediate level that strikes a balance between challenge and skill. Student learning will include participating in creative activities and listening perceptively. Students will also be required to develop athorough understanding of the language of music, including the

					elements, terminology, and history. The focus of this course will be on vocal music.
AVI2O1	Visual Arts-Comprehensive	10	Open	Art	Course Outline: 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.
BBI2O1	Introduction to Business	10	Open	Business Studies	This course introduces students to the world of business. Students will develop an understanding of the functions of business, including accounting, marketing, information 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. Students who take BBI10 are not allowed to take BBI20 Introduction to Business.
CHC2D1	Canadian History since WW1	10	Academic	History	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.

CHC2L1	Canadian History	10	Locally Developed	Canadian and World Studies	This locally developed course in Canadian history provides students with the opportunity to complete the compulsory credit for history that is required to graduate. It will lead to other workplace courses at the senior level.
CHC2P1	Canadian History since World War I	10	Applied	History	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
CHV2O5	Civics and Citizenship(0.5credit)	10	Open	Civics	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

ENG2D1	English	10	Academic	English	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 1I university or college preparation course.
ENG2L1	English	10	Locally Developed	English	In this course, students focus on extending their literacy and communication skills to prepare for success in their daily lives, in the workplace The course is organized by strands that extend listening and talking skills, reading and viewing skills, and writing skills. In all strands, the focus is on refining foundational literacy skills and on using language clearly and accurately in a variety of authentic contexts. Students build on their strategies and engage in the processes involved in talking, listening, reading, viewing, writing, and thinking. Students reflect regularly upon their growth in these areas.
ENG2P1	English	10	Applied	English	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.

FSF2D1	Core French	10	Academic	Français	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 continue to develop their language knowledge and skills 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 continue to develop the skills necessary to become life-long language learners. Prerequisite: Core French, Grade 9, Academic or Applied
FSF2P1	Core French	10	Applied	Français	This course provides opportunities for students to communicate in French about everyday matters and topics of personal interest in real-life situations. Students will exchange information, ideas, and opinions with others in structured, guided, and increasingly spontaneous spoken interactions. Students will develop their skills in listening, speaking, reading, and writing through using language learning strategies for understanding texts and communicating clearly. 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
GLC2O5	Career Studies(0.5credit)	10	Open	CAREERS	This course teaches students how to develop and achieve personal goals in education and work and contribute to their communities. Student learning will include assessing their own knowledge, skills, and characteristics and investigating economic trends, workplace organization, work opportunities, and ways to search for work. The course explores post-secondary learning options, prepares students for community-based learning, and helps them build the capabilities needed for managing work and

					life transitions. Students will design action plans for pursuing their goals.
GLE2O1	Learning Strategies	10	Open	Guidance and Career Education	This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace and the community. The course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond.
HRE2O1	Religious Education	10	Open	Religion	This course examines the relationship between the person and message of Christ and the dominant attitudes of contemporary culture. Beginning with the Gospel narratives as a foundation, students acquire a deeper and more systematic knowledge of Christ, his message and his Church. Connections between the living Church and contemporary culture and explored in terms of what it means to be a responsible adolescent developing within a community of disciples in the context of a secular, pluralistic world. In the Family Life Education strand, students explore a variety of topics related to the themes of personhood, interpersonal relationships and sexuality.
ICS201	Introduction to Computer Studies	10	Open	Computer Studies	This course introduces students to computer programming. Students will plan and write simple computer programs by applying fundamental programming concepts, and learn to create clear and maintainable internal documentation. They will also learn to manage a computer by studying hardware configurations, software selection, operating system functions, networking, and

					safe computing practices. Students will also investigate the social impact of computer technologies, and develop an understanding of environmental and ethical issues related to the use of computers. Prerequisite: None
MAT2L1	Mathematics	10	Locally Developed	Mathematics	This course is designed to provide additional experiences in problem solving. Ideas will be presented in a realistic context providing students with an opportunity to explore, organize, interpret, and use mathematical models to solve problems.  Repetition of skills and exposure to technology are key aspects of this course.
MFM2P1	Foundations of Mathematics	10	Applied	Mathematics	This course enables students to consolidate their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and handson 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 relationships. Students will investigate similar triangles, the trigonometry of right-angled triangles, and the measurement of three-dimensional objects. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.
MPM2D1	Principles of Mathematics	10	Academic	Mathematics	This course enables students to broaden their understanding of relations, extend their skills in multi-step problem solving, and continue to develop their abilities in abstract reasoning. Students will pursue investigations of quadratic functions and their applications; solve and apply linear systems; solve multi-step problems in analytic geometry to verify properties of geometric

					figures; investigate the trigonometry of right and acute triangles; and develop supporting algebraic skills.
NAC2O1	Aboriginal Peoples in Canada	10	Open	Native Studies	This course explores the histories of First Nations, Métis, and Inuit peoples in Canada from precontact to the present day. Students will examine the impact of past social, cultural, economic, political, and legal trends and developments on First Nations, Métis and Inuit communities and individuals. Students will apply the concepts of historical thinking and the historical inquiry process to investigate a range of issues, events, and interactions that have affected First Nations, Métis, and Inuit peoples, including those that continue to affect relations between Aboriginal peoples and other Canadians today.
PAL2OB	Court Sports	10	Open	Physical Education	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. Students will develop the above knowledge and skills through participation and instruction in territory and invasion court sports (e.g. Basketball. Please be advised students can take only ONE PAL course per grade.

PAL2OS	Field Sports	10	Open	Physical Education	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. Students will develop the above knowledge and skills through participation and instruction in territory and invasion field sports (e.g. Soccer ) Please be advised students can take only ONE PAL course per grade.
PPL2OF	Healthy Active Living Female	10	Open	Physical Education	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.
PPL2OM	Healthy Active Living Male	10	Open	Physical Education	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.

SNC2D1	Science	10	Academic	Science	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
SNC2L1	Science	10	Locally Developed	Science	This course emphasizes reinforcing and strengthening science-related knowledge and skills, including scientific inquiry, critical thinking, and the environmental impact of science and technology, to prepare students for success in everyday life, in the workplace, and in the Grade 11 Science Workplace Preparation course. Students explore a range of topics, including science in media, interactions of common materials, interdependence of organisms in communities, and using electrical energy.
SNC2P1	Science	10	Applied	Science	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

TCJ2O1	Exploring Construction Technology	10	Open	Technological Education	This course introduces students to building materials and processes through opportunities to design and build various construction projects. Students will learn to create and read working drawings; become familiar with common construction materials, components, and processes; and perform a variety of fabrication, assembly, and finishing operations. They will use a variety of hand and power tools and apply knowledge of imperial and metric systems of measurement, as appropriate. Students will develop an awareness of environmental and societal issues related to construction technology and will explore secondary and postsecondary pathways leading to careers in the industry.
TDJ2O1	Technological Design	10	Open	Technological Education	This course provides students with opportunities to apply a design process to meet a variety of technological challenges. Students will research projects, create designs, build models and/or prototypes, and assess products and/or processes using appropriate tools, techniques, and strategies. Student projects may include designs for homes, vehicles, bridges, robotic arms, clothing, or other products. Students will develop an awareness of environmental and societal issues related to technological design, and will learn about secondary and postsecondary education and training leading to careers in the field
TEJ2O1	Computer Engineering Technology	10	Open	Technological Education	This course introduces students to computer systems, networking, and interfacing, as well as electronics and robotics. Students will assemble, repair, and configure computers with various types of operating systems and application software. Students will build small electronic circuits and write computer programs to control simple peripheral devices or robots. Students will also develop an

					awareness of related environmental and societal issues and will learn about secondary and postsecondary pathways and career opportunities in computer technology.
TGJ2O1	Communications Technology	10	Open	Technological Education	This course introduces students to communications technology from a media perspective. Students will work in the areas of TV/video and movie production, radio and audio production, print and graphic communications, photography, and animation. Student projects may include computer-based activities such as creating videos, editing photos, working with audio, cartooning, developing animations, and designing web pages. Students will also develop an awareness of environmental and societal issues related to communications technology and explore secondary and postsecondary education and training pathways and career opportunities in the various communications technology fields. Prerequisite: None
TMJ2O1	Manufacturing Technology	10	Open	Technological Education	This course introduces students to the scope of the manufacturing industry, the various components used in the design of products, the industrial tools and equipment used, and methods of manufacturing, including assembly-line production. Students will learn about technical drawing; preparation processes; manufacturing techniques; power, electronic, and quality control systems; careers in the manufacturing field; and the role of entrepreneurs in Canadian society.
TTJ2O1	Transportation Technology	10	Open	Technological Education	This course requires students to build projects and to learn service procedures related to different modes of transportation. Students will learn about support systems for transporting people and products; measurement systems and methods' the analysis, design, and construction of a system to convert and make practical use of energy; the function of major vehicle system

					components; the impact of transportation systems on the environment; communication skills; and transportation-related careers.
TXJ2O1	Hairstyling and Aesthetics	10	Open	Technological Education	This course presents hairstyling, make-up, and nail care techniques from a salon/spa perspective. Through a variety of school and community-based activities, students learn fundamental skills in hairstyling, giving manicures and facials and providing hair/scalp analyses, and treatments. Students also consider related environmental and societal issues and explore secondary and postsecondary pathways leading to careers in the field of hairstyling and aesthetics. Prerequisite: None
ADA3M1	Drama	11	University/College	Art	Course Outline: This course requires students to create and perform in dramatic presentations. Students will analyse, interpret, and perform dramatic works from various cultures and time periods. Students will research various acting styles and conventions that could be used in their presentations, and analyse the functions of playwrights, directors, actors, designers, technicians, and audiences. Prerequisite: Drama, Grade 9 or 10, Open
AMG3M1	Guitar	11	University/College	Art	This course develops students' artistic knowledge and skills through the performance of music and the preparation of music productions. Students will perform appropriate works, particularly works in contemporary popular styles. Independently and in groups, they will also plan, market, and produce music productions, making use of appropriate technology, and will evaluate the results. The focus of this course will be on the guitar.

AMR3M1	Music/Repertoire	11	University/College	Art	Course Outline: 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. Prerequisite: Music, Grade 9 or 10, Open
AMV3O1/M	Music - Vocal/Choral	11	Open or University/College	Art	This course develops students' musical literacy through vocal musical theatre performance and the preparation of presentation of music productions. Students will perform works at a level consistent with previous experience. Independently and collaboratively, students will use current technology and the creative and critical analysis processes to plan, produce, present, and market musical productions. Students will respond to, reflect on, and analyze music from various genres and periods, and they will develop skills transferable to other aspects of their life and their careers. Prerequisite: None (Although no prerequisite is required, it is in the students' best interest to already have vocal ability, otherwise Grade 10 Vocal Music would be a more suitable course)
ASM3M1	Media Arts	11	University/College	Art	Media Arts Gaming and App Design This course enables students to create media art works using available and emerging technologies such as computer animation, digital imaging, and video, and a variety of media. Students will explore the elements and principles of media arts, the connections between contemporary media art works and traditional art forms, and the

					importance of using responsible practices when engaged in the creative process. Students will develop the skills necessary to create and interpret media art works. Prerequisite: ASM2O1
AVI3M1	Visual Arts-Comprehensive	11	University/College	Art	This course provides students with opportunities to further develop their skills and knowledge in visual arts. Students will explore a range of subject matter through studio activities and will consolidate their practical skills. Students will also analyse art works and study aspects of Western art history, as well as art forms from Canada and other parts of the world.
AWQ3M1	Visual Arts - Photography	11	University/College	Art	AWQ 3M - The basis of this introductory course deals with the camera and basic techniques of photography and darkroom usage. The student will develop an artistic eye for composition and aesthetics through analysis of their photographs and the work of other photographers. Our goal is a blending of technology, self-expression and experience to create good photographs. The prerequisite for this course is AVI 10 or AVI 20. This course (AWQ 3M) is the prerequisite needed to take AWQ 4M.
AWQ301	Visual Arts Photography	11	Open	Art	This course focuses on studio activities in one or more of the visual arts. Students will create art works that explore a wide range of subject matter, and will evaluate art works, providing grounds for their aesthetic judgements. They will also examine historical and cultural contexts of Western art (including Canadian art) and art from various world cultures to support their study of specific media. The focus will be on Photography.
BAF3M1	Financial Accounting Fundamentals	11	University/College	Business Studies	This course introduces students to the fundamental principles and procedures of accounting, with emphasis on accounting procedures used in service and merchandising businesses.

					Students will develop an understanding of the connections between financial analysis, control, and decision making in the management of a business, as well as the effects of technology and globalization on accounting procedures and the role of the accountant.
BDI3C1	Entrepreneurship: The Venture	11	College	Business Studies	This course focuses on ways in which entrepreneurs recognize opportunities, generate ideas, and organize resources to plan successful ventures that enable them to achieve their goals. Students will create a venture plan for a student-run school-based or summer business. Through hands-on experiences, students will have opportunities to develop the values, traits, and skills most often associated with successful entrepreneurs.
BMI3C1	Marketing: Goods, Services, Events	11	College	Business Studies	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.
CGG3O1	Travel & Tourism	11	Open	Canadian and World Studies	This course focuses on issues related to travel and tourism within and between various regions of the world. Students will investigate unique environmental, sociocultural, economic, and political characteristics of selected world regions. They will explore travel patterns and trends as well as tensions related to tourism and will predict future tourism destinations. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate the impact of the travel industry on natural environments and human communities.

CHA3U1	American History	11	University	Canadian and World Studies	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
CHW3M1	History-End of 15th Century	11	University/College	Canadian and World Studies	This course explores the history of various societies around the world, from earliest times to around 1500 CE. Students will examine life in and the legacy of various ancient and pre-modern societies throughout the world, including those in, Africa, Asia, Europe, and the Americas. 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: Canadian History since World War I, Grade 10, Academic or Applied
CLU3M1	Understanding Canadian Law	11	University/College	Canadian and World Studies	This course explores Canadian law, with a focus on legal issues that are relevant to the lives of people in Canada. Students will gain an understanding of rights and freedoms in Canada, our legal system, and family, contract, employment, tort, and criminal law. Students will use case studies and apply the concepts of legal thinking and the legal inquiry process to develop legal reasoning skills and to formulate and communicate informed interpretations of legal issues, and they will develop the ability to advocate for new laws. Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied

EMS3O1	Media Studies	11	Open	English	This course emphasizes knowledge and skills that will enable students to understand media communication in the twenty-first century and to use media effectively and responsibly. Through analysing the forms and messages of a variety of media works and audience responses to them, and through creating their own media works, students will develop critical thinking skills, aesthetic and ethical judgement, and skills in viewing, representing, listening, speaking, reading, and writing.
ENG3C1	English	11	College	English	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.
ENG3E1	English	11	Workplace	English	This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will study the content, form, and style of a variety of contemporary informational, graphic, and literary texts; and create oral, written, and media texts in a variety of forms for practical purposes. An important focus will be on using language clearly and accurately in a variety of formal and informal contexts. The course is intended to prepare students for the compulsory Grade 12 workplace preparation course. Students who have successfully completed ENG2L may also select this course.

ENG3U1	English	11	University	English	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.
EPS3O1		11	Open	English	Presentation and Speaking Skills, Grade 11, Open (EPS3O) This course emphasizes the knowledge and skills required to plan and make effective presentations and to speak effectively in both formal and informal contexts, using such forms as reports, speeches, debates, panel discussions, storytelling, recitations, interviews, and multimedia presentations. Students will research and analyse the content and characteristics of convincing speeches and the techniques of effective speakers; design and rehearse presentations for a variety of purposes and audiences; select and use visual and technological aids to enhance their message; and assess the effectiveness of their own and others' presentations. Prerequisite: Grade 10 English, Academic or Applied
FSF3U1	Core French	11	University	Français	This course offers students extended opportunities to speak and interact in real-life situations in French with greater independence. Students will develop their creative and critical thinking skills through responding to and exploring a variety of oral and written texts. They will continue to broaden their understanding and appreciation of diverse French-speaking

					communities and to develop the skills necessary for life-long language learning.
GLE3O1	Advanced Learning Strategies	11	Open	Guidance and Career Education	This course improves students' learning and personal management skills, preparing them to make successful transitions to work, training, and/or postsecondary education destinations. Students will assess their learning abilities and use literacy, numeracy, and research skills and personal management techniques to maximize their learning. Students will investigate trends and resources to support their postsecondary employment, training, and/or education choices and develop a plan to help them meet their learning and career goals.
HPC3O1	Parenting	11	Open	Social Studies and Humanities	This course focuses on the skills and knowledge parents, guardians, and caregivers need, with particular emphasis on maternal health, pregnancy, birth, and the early years of human development (birth to six years old). Through study and practical experience, students will learn how to meet the developmental needs of young children, communicate with them, and effectively guide their early behaviour. Students will develop their research skills through investigations related to caregiving and child rearing.
HRF3O1	World Religions	11	Open	Religion	This course enables students to study world religions and belief traditions in local, Canadian, and global contexts. Students will explore aspects of the human quest for meaning and will examine world religions and belief traditions as exemplified in various sacred teachings and principles, rites, and passages. They will also study the interaction throughout history between society and various belief traditions, and will have opportunities to develop

					research and inquiry skills related to the study of world religions and belief traditions. Prerequisite: None
HRT3M1	World Religions	11	University/College	Religion	This course provides students with opportunities to explore various world religions and belief traditions. Students will develop knowledge of the terms and concepts relevant to this area of study, will examine the ways in which religions and belief traditions meet various human needs, and will learn about the relationship between belief and action. They will examine sacred writings and teachings, consider how concepts of time and place influence different religions and belief traditions, and develop research and inquiry skills related to the study of human expressions of belief. Prerequisite: None.
HSP3C1	Introduction to Social Sciences	11	College	Social Studies and Humanities	This course introduces students to theories, questions, and issues related to anthropology, psychology, and sociology. Students learn about approaches and research methods used by social scientists. They will be given opportunities to apply theories from a variety of perspectives, to conduct social science research, and to become familiar with current issues within the three disciplines. Prerequisite: None.
HSP3U1	Introduction to Social Sciences	11	University	Social Studies and Humanities	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, 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).
ICS3U1	Introduction to Computer Science	11	University	Computer Studies	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.
IDC3OF	Business Leadership	11	Open	Business Studies	This course is designed to help students learn about and navigate through various financial decisions they will be faced with in life. Some of the financial planning topics to be covered include budgeting, savings, mortgages, investments, insurance, and debt. Students will learn to apply these concepts critically through theoretical investigation and research into a variety of Canadian and International financial institutions. Prerequisite: Any grade 11 U or M math course
MBF3C1	Foundations for College Math	11	College	Mathematics	This course enables students to broaden their understanding of exponential growth and of important areas of personal finance. Students will investigate properties of exponential functions and develop skills in manipulating exponential expressions; solve problems and investigate financial applications involving compound interest and annuities; and apply mathematics in

					making informed decisions about transportation, accommodation, and career choices.
MCF3M1	Functions & Applications	11	University/College	Mathematics	This course introduces some financial applications of mathematics and extends students' experiences with functions. Students will solve problems in personal finance involving applications of sequences and series; investigate properties and applications of trigonometric functions; develop facility in operating with polynomials, rational expressions, and exponential expressions; develop an understanding of inverses and transformations of functions; and develop facility in using function notation and in communicating mathematical reasoning.
MCR3U1	Functions	11	University	Mathematics	This course introduces some financial applications of mathematics, extends students' experiences with functions, and introduces second-degree relations. Students will solve problems in personal finance involving applications of sequences and series; investigate properties and applications of trigonometric functions; develop facility in operating with polynomials, rational expressions, and exponential expressions; develop an understanding of inverses and transformations of functions; and develop facility in using function notation and in communicating mathematical reasoning. Students will also investigate loci and the properties and applications of conics.
MEL3E1	Mathematics for Everyday Life	11	Workplace	Mathematics	This course enables students to broaden their understanding of mathematics as it is applied in important areas of day-to-day living. Students will solve problems associated with earning money, paying taxes, and making purchases; apply calculations of simple and compound interest in saving, investing, and borrowing;

					and calculate the costs of transportation and travel in a variety of situations.
NGC3OC	Cooperative Education	11	Open	Guidance and Career Education	This course consists of a learning experience connected to a community and a cooperative education curriculum that incorporates relevant expectations from the student's related course (or courses). Students will develop skills, knowledge, and habits of mind that will support them in their learning, including their education and career/life planning, at school and beyond, today and in the future. Within the context of their experience connected to a community, students will apply, extend, and refine skills and knowledge acquired in their related course or courses and will apply skills, knowledge and habits of mind that will protect and promote their health, safety, and well-being. They will create and implement a learning plan that meets their particular interests and needs, reflect on their learning, and make connections between their experience in the community and other aspects of their lives.
PAF3OB	Personal and Fitness Activities	11	Open	Physical Education	Boys' weight training. 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 build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. Students will focus their activities in the weight room and participate in a dynamic weight-training environment to improve their personal fitness. Students will have the opportunity to try various training programs, choose programs they are interested in and develop a personalized fitness plan. Students will develop the

					confidence to use varied equipment safely and successfully.  Please be advised, students can only recieve ONE credit for a PAF
					course per grade.
PAF3OG	Female Weight Training	11	Open	Physical Education	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. The focus of this course is to promote a healthy lifestyle through personal activities involving Weight Training.
PAI3OR	Rec & Leisure Activities	11	Open	Physical Education	This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities that have the potential to engage students' interest throughout their lives. Students will be encouraged to develop personal competence in a variety of movement skills and will be given opportunities to practice goal-setting, decision-making, social, and interpersonal skills. Students will also study the components of healthy relationships, reproductive health, mental health, and personal safety.
PPL3OF	Healthy Active Living Female	11	Open	Physical Education	This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities that have the potential to engage students' interest throughout their lives.

PPL3OM	Healthy Active Living Male	11	Open	Physical Education	This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities that have the potential to engage students' interest throughout their lives.  Students will be encouraged to develop personal comp
SBI3C1	Biology	11	Open	Science	This course focuses on the processes involved in biological systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, animal anatomy and physiology, plant structure and physiology, and environmental science. Emphasis will be placed on the practical application of concepts, and on the skills needed for further study in various branches of the life sciences and related fields.
SBI3U1	Biology	11	University	Science	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
SCH3U1	Chemistry	11	University	Science	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

SPH3U1	Physics	11	University	Science	This course develops students' understanding of the basic concepts of physics. Students will study the laws of dynamics and explore different kinds of forces, the quantification and forms of energy (mechanical, sound, light, thermal, and electrical), and the way energy is transformed and transmitted. They will develop scientific-inquiry skills as they verify accepted laws and solve both assigned problems and those emerging from their investigations. Students will also 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
SVN3M1	Environmental Science	11	University/College	Science	This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in life after secondary school. Students will explore a range of topics, including the role of science in addressing contemporary environmental challenges; the impact of the environment on human health; sustainable agriculture and forestry; the reduction and management of waste; and the conservation of energy. Students will increase their scientific and environmental literacy and examine the interrelationships between science, the environment, and society in a variety of areas. Prerequisite: Grade 10 Science, Applied or Academic
TCJ3C1	Exploring Construction Technology	11	College	Technological Education	This course requires students to design, build, and evaluate projects using design instruments and machine and hand tools. Students will solve technological problems through a variety of media; identify and describe building materials and other resources needed to construct, maintain, and service buildings; identify support systems and components; apply safety rules related to materials, processes, and equipment; identify common

					architectural styles; and identify careers related to construction technology.
TDJ3M1	Technological Design	11	University/College	Technological Education	This course provides students with opportunities to apply the principles of technological design to challenges in communications, manufacturing, electronics, transportation, architecture, industrial and consumer products, health and safety equipment, and environmental services. Students will identify user needs, estimate labour and material costs, analyse material characteristics, and illustrate design solutions, using traditional and computer-based methods. They will also acquire the basic design skills required for postsecondary studies in engineering, manufacturing, architecture, and construction.
TPJ3C1	Health Care	11	College	Technological Education	This course focuses on the development of knowledge and skills that will benefit students planning a career in the health care field. Students will learn about human anatomy and physiology, homeostasis, vital signs, disease prevention and treatment, how lifestyle choices affect health and well-being, and conventional and complementary methods of disease prevention and treatment. Students will develop an awareness of health and safety issues, environmental and societal issues related to health care, and career opportunities in the field. Prerequisite: None
TTJ3C1	Transportation Technology	11	College	Technological Education	This course enables students to develop technical knowledge and skills as they study, test, service, and repair engine, electrical, suspension, brake, and steering systems on vehicles, aircraft, and/or watercraft. Students will develop communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will develop an awareness of environmental and societal issues related to transportation and

will learn about apprenticeship and college	programs leading to
careers in the transportation industry. Prer	equisite: None

					will learn about apprenticeship and college programs leading to careers in the transportation industry. Prerequisite: None
ADA4M1	Drama	12	University/College	Art	Course Outline: This course requires students to experiment individually and collaboratively with forms and conventions of both drama and theatre from various cultures and time periods. Students will interpret dramatic literature and other text and media sources while learning about various theories of directing and acting. Students will examine the significance of dramatic arts in various cultures and will analyse how the knowledge and skills developed in drama are related to their personal skills, social awareness, and goals beyond secondary school. Prerequisite: Drama, Grade 11, University/College Preparation
AMG4M1	Guitar	12	University/College	Art	This guitar course continues to develop techniques covered in AMG3M and introduces new styles as well. Continued development in the areas of theory and music history is also included. Students are required to have taken AMG3M or must have the permission of the teacher to enroll in this course.
AMR4M1	Music/Repertoire	12	University/College	Art	Course Outline: 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. Prerequisite: Music, Grade 11, University/College Preparation

AVI4M1	Visual Arts-Comprehensive	12	University/College	Art
AWQ4M1	Photography	12	University/College	Art
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AWE4M1/AWS4M1	Visual Arts - Information	12	University/College	Art
	/Consumer		•	

Course Outline: This course focuses on enabling students to refine their use of the creative process when creating and presenting two- and three-dimensional art works using a variety of traditional and emerging media and technologies. Students will use the critical analysis process to deconstruct art works and explore connections between art and society. The studio program enables students to explore a range of materials, processes, and techniques that can be applied in their own art production. Students will also make connections between various works of art in personal, contemporary, historical, and cultural contexts. Prerequisite: Visual Arts, Grade 11, University/College Preparation

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. The focus will be on photography.

This is a two-semester course which must be taken with AWS4M Visual Arts – Digital Media and is worth one credit. These components will run concurrently. The main focus will be the production of the school yearbook by classical and digital processes utilizing computers. Students will analyze publications, use theories of design, create journalistic documentation, and study applied photography and research international influences. These courses help students to meet Ontario graduate expectations by enabling each person to become an effective communicator who uses and integrates the Catholic faith tradition

## in the critical analysis of the arts, media, technology and information systems to enhance the quality of life.

BAT4M1	Financial Accounting Principles	12	University/College	Business Studies	This course emphasizes study of accounting principles related to financial statements. Students will learn about ways in which information in these statements is used in making business decisions, and about the effects on financial statements of using different methods of inventory valuation and adjusting and reversing entries. Students will also study various means of financing a business and ways in which the strength of a corporation can be determined through the reading of its annual report. Prerequisite: BAF3M
BBB4M1	International Business	12	University/College	Business Studies	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.
BOH4M1	Business Leadership	12	University/College	Business Studies	This course focuses on ways in which organizations deal with issues affecting their competitiveness in a changing technological and global business environment. Students will analyse various leadership techniques and study various issues such as ethics in business, social responsibility, management of group dynamics, uses of information technology, workplace stress and conflict, motivation of employees, and globalization. Students will also investigate the management of a diverse workforce within an organization and the importance of strategic planning.

CGW4U1	World Issues	12	University	Business Studies	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 Note: This is a Canadian and World Studies course
CHY4U1	History since 15th Century	12	University	Canadian and World Studies	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.
CIA4U1	Analysing Economic Issues	12	University	Canadian and World Studies	This course examines current national and global economic trends and policies from diverse perspectives. Students will explore the impact of choices that individuals and institutions, including governments, make in responding to local, national, and global economic issues such as globalization and global economic inequalities, trade agreements, national debt, taxation, social spending, and consumer debt. Students will apply the concepts of economic thinking and the economic inquiry process, including economic models, to investigate, and develop informed opinions

about, current economic issues and to help them make reasoned economic decisions. Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities Please Note: This is a Canadian World Studies Course

CLN4U1	Canadian and International Law	12	University	Canadian and World Studies	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
ENG4C1	English	12	College	English	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. Students considering moving from one destination to

another (e.g., college to university; workplace to college) must successfully complete a transfer course. Students who have successfully completed ENG3U may also select this course.

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

ENG4E1	English	12	Workplace	English	This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will analyse informational, graphic, and literary texts and create oral, written, and media texts in a variety of forms for workplace-related and practical purposes. An important focus will be on using language accurately and organizing ideas and information coherently. The course is intended to prepare students for the workplace and active citizenship. Students considering moving from one destination to another (e.g., college to university; workplace to college) must successfully complete a transfer course. Students who have successfully completed ENG3C or ENG3U may also select this course.
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University

English

12

ENG4U1

English

prepare students for university, college, or the workplace.

Prerequisite: ENG3U

ETS4U1	Studies in Literature	12	University	English	This course is for students with a special interest in literature, literary adaptation and literary criticism. The course may focus on themes, genres, time periods, or countries. Students will analyse a range of forms and stylistic elements of media texts, 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.
EWC4U1	The Writer's Craft	12	University	English	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.
FSF4U1	Core French	12	University	Français	This course provides extensive opportunities for students to speak and interact in French independently. Students will apply language-learning strategies in a wide variety of real-life situations and will continue to develop their creative and critical thinking skills through responding to and interacting with a variety of oral and written texts. Students will also continue to enrich their understanding and appreciation of diverse French-speaking communities and to develop the skills necessary for life-long

language learning. Prerequisite: Core French, Grade 11, University Preparation

GLE4O1	Advanced Learning Strategies	12	Open	Guidance and Career Education	This course improves students' learning and personal management skills, preparing them to make successful transitions to work, training, and/or postsecondary education destinations. Students will assess their learning abilities and use literacy, numeracy, and research skills and personal management techniques to maximize their learning. Students will investigate trends and resources to support their postsecondary employment, training, and/or education choices and develop a plan to help them meet their learning and career goals.
HFA4U1	Nutrition and Health	12	University	Social Studies and Humanities	This course examines the relationships between food, energy balance, and nutritional status; the nutritional needs of individuals at different stages of life; and the role of nutrition in health and disease. Students will evaluate nutrition-related trends and will determine how food choices can promote food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food-preparation techniques, and develop their social science research skills by investigating issues related to nutrition and health. Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies.

HHS4U1	Families in Canada	12	University	Social Studies and Humanitie
HRE4M1	Religious Education	12	University/College	Religion

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.

This course is directed toward the clear identification of Catholic moral principles and the concrete application of these principles in the lives of students. The course proceeds from foundational beliefs rooted in Sacred Scripture concerning justice and peace to an exploration of the principles that shape Christian life. In the family Life Education strand, students explore a variety of topics related to the themes of personhood, interpersonal relationships and sexuality. Special attention is given to the interaction between the Church and culture. The modern world is characterized by a multiplicity of values, philosophies and ideologies. In a democratic, pluralistic society, these concepts may creatively reinforce one another, or they may compete with and contradict one another. The Christian moral life is a call to follow Jesus Christ, to believe in the redemptive love of God for humankind and to proclaim and incarnate the reign of God as inaugurated by Jesus Christ.

HRE4O1	Religious Education	12	Open
HSB4U1	Challenge and Change in Society	12	University
HSB4U1	Challenge and Change in Society	12	University
HSB4U1		12	University

Religion

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 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.

Social Studies and Humanities

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 analyse how and why cultural, social, and behavioural patterns change over time. They will explore the ideas of social theorists and use those ideas to analyse 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. Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies.

HSE4M1	Equity, Diversity, and Social Justi	12	University/College	Religion	The aim of this course is to assist students in understanding themselves as moral persons living the way of Christ through an examination of the revelation of sacred Scripture, and the experience and teaching of the Catholic Church. This course enables students to develop an understanding of the theoretical, social, and historical underpinnings of various equity and social justice issues, and to analyse strategies for bringing about positive social change, through a Catholic perspective. Through the process of inquiry, students will learn about historical and contemporary equity and social justice issues in Canada and globally. They will also explore power relations and the impact of a variety of factors on equity and social justice through the inquiry process. Students will engage in critical reflection on these issues in light of Scripture, Church teaching, and important thinkers. Students will develop and apply research skills and will design and implement a social action initiative for change
HZT4U1	Philosophy	12	University/College	Social Studies and Humanities	This course further develops students' computer programming skills. Students will learn object-oriented programming concepts, create object-oriented software solutions, and design graphical user interfaces. Student teams will plan and carry out a software development project using industry-standard programming tools and proper project management techniques.
ICS4C1	Computer Science	12	College	Computer Science	This course further develops students' computer programming skills. Students will learn object-oriented programming concepts, create object-oriented software solutions, and design graphical user interfaces. Student teams will plan and carry out a software development project using industry-standard programming tools and proper project management techniques.

ICS4U1	Computer Science	12	University	Computer Studies	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
IDC4UL	Interdisciplinary Studies- Leadership	12	University	Interdisciplinary Studies	This course will help develop and consolidate the skills to solve problems, make decisions, and create personal meaning. This course will introduce students to leadership theories as they pursue leadership roles in the school and community. Students will study and apply theory in developing skills in the areas of conflict resolution, planning and goal setting, group dynamics and teamwork. Students will develop the skills and knowledge to support them in pursuing a variety of leadership roles. (please note students can only take one IDC course. It will not count as two credits if you take more than one).
IDC4US	Interdisciplinary Studies-Sport	12	University	Interdisciplinary Studies	This course will help develop and consolidate the skills to solve problems, make decisions, and create personal meaning. This course will introduce students to leadership theories as they pursue leadership roles in the school and community. Students will study and apply theory in developing skills in the areas of conflict resolution, planning and goal setting, group dynamics and teamwork. Students will develop the skills and knowledge to support them in pursuing a variety of leadership roles. (please

note students can only take one IDC course. It will not count as two credits if you take more than one).

MAP4C1	Foundations for College Math	12	College	Mathematics	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; 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.
MCT4C1	Math for College Technology	12	College	Mathematics	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	Calculus and Vectors	12	University	Mathematics	Course Outline: 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 Advanced Functions can be taken concurrently with or can precede Calculus and Vectors.
MDM4U1	Mathematics of Data Mgmt	12	University	Mathematics	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 the 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: MCF3M or MCR3U
MEL4E1	Mathematics for Everyday Life	12	Workplace	Mathematics	This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life.  Students will use statistics in investigating questions; apply the concept of probability to solve problems in familiar situations; investigate accommodation costs and create household budgets; use proportional reasoning; estimate and measure; and apply geometric concepts to create designs. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

MHF4U1	Advanced Functions	12	University	Mathematics	Course Outline: 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. Prerequisite: MCR3U
NGC4OC	Cooperative Education	12	Open	Guidance and Career Education	This course consists of a learning experience connected to a community and a cooperative education curriculum that incorporates relevant expectations from the student's related course (or courses). Students will develop skills, knowledge, and habits of mind that will support them in their learning, including their education and career/life planning, at school and beyond, today and in the future. Within the context of their experience connected to a community, students will apply, extend, and refine skills and knowledge acquired in their related course or courses and will apply skills, knowledge and habits of mind that will protect and promote their health, safety, and well-being. They will create and implement a learning plan that meets their particular interests and needs, reflect on their learning, and make connections between their experience in the community and other aspects of their lives.
OLC4O1	Ontario Literacy Course	12	Open	English	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

PAF4OB	Personal and Fitness Activities	12	Open	Physical Education
PAF4OG	Personal and Fitness Activities	12	Open	Physical Education

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 manager a portfolio containing a record of their reading experiences and samples of their writing.

Boys Weight Training. 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 build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. Students will focus their activities in the weight room and participate in a dynamic weight-training environment to improve their personal fitness. Students will have the opportunity to try various training programs, choose programs they are interested in and develop a personalized fitness plan. Students will develop the confidence to use varied equipment safely and successfully. Please be advised students can only receive ONE credit for a PAF course per grade.

Female weight training. 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 build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. Students will spend time developing both their mental and physical wellness. Students will focus most of their activities in the

PAI4OR	Rec & Leisure Activities	12	Open	Physical Education
PPL4OF	Female Fun Fit	12	Open	Physical Education

weight room but will explore many types of training to improve their personal fitness. Students will have the opportunity to try various training programs, choose programs they are interested in and develop a personalized fitness plan. Students will develop the confidence to use varied equipment safely and successfully. Please be advised students can only take one credit in PAF per grade

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. Students will focus their activities on non-competitive recreation and leisure activities. Some activities may take place off school property which may require a fee.

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; developing their mental

					wellness. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. Students will participate in a variety of fitness activities such as running, yoga, circuits, weights, and dance with the purpose of developing their overall personal fitness and understanding of a healthy lifestyle. Students will have the opportunity to choose those fitness activities that they have an interest in and will be able to develop their own personalized fitness plan.
PPL4OM	Healthy Active Living Male	12	Open	Physical Education	This course focuses on the development of a personalized approach to healthy active living through participation in a variety of sports and recreational activities that have the potential to engage students' interest throughout their lives. Students will develop and implement personal physical fitness plans. In addition, they will be given opportunities to refine their decision-making, conflict-resolution, and interpersonal skills, with a view to enhancing their mental health and their relationships with others.
PSK4U1	Introductory Kinesiology	12	University	Physical Education	This course focuses on the study of human movement and of systems, factors and principals involved in human development. Students will learn about the effects of physical activity on health and performance, the evolution of physical activity and sports and the factors that influence an individual's participation in physical activity. The course prepares students for university programs in physical education, kinesiology, recreation and sports administration.
SBI4U1	Biology	12	University	Science	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

SCH4C1	Chemistry	12	College	Science
SCH4U1	Chemistry	12	University	Science

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

This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment. Students will use a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment. Prerequisite: Science, Grade 10, Academic or Applied

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

SES4M1	Earth and Space	12	University/College	Science	This course develops students' understanding of Earth and its place in the universe. Students will investigate the properties of and forces in the universe and solar system and analyse techniques scientists use to generate knowledge about them. Students will closely examine the materials of Earth, its internal and surficial processes, and its geological history, and will learn how Earth's systems interact and how they have changed over time. Throughout the course, students will learn how these forces, processes, and materials affect their daily lives. The course draws on biology, chemistry, physics, and mathematics in its consideration of geological and astronomical processes that can be observed directly or inferred from other evidence. Prerequisite: Science, Grade 10, Academic
SPH4C1	Physics	12	College	Science	This course develops students' understanding of the basic concepts of physics. Students will explore these concepts as they relate to mechanical, electrical, fluid (hydraulic and pneumatic), and communications systems, as well as to the operation of commonly used tools and equipment. They will develop scientificinquiry skills as they verify accepted 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. Prerequisite: Science, Grade 10, Academic or Applied
SPH4U1	Physics	12	University	Science	This course enables students to deepen their understanding of the concepts and theories of physics. Students will explore further the laws of dynamics and energy transformations, and will investigate electrical, gravitational, and magnetic fields; electromagnetic radiation; and the interface between energy and matter. They will further develop inquiry skills, learning, for example, how the interpretation of experimental data can provide indirect evidence to support the development of a scientific model. Students will

## also consider the impact on society and the environment of technological applications of physics. Prerequisite: Physics, Grade 11, University Preparation

TCJ4C1	Construction Technology	12	College	Technological Education	This course requires students to design, build, and evaluate projects using design instruments and machine and hand tools. Students will solve technological problems through a variety of media; identify and describe building materials and other resources needed to construct, maintain, and service buildings; identify support systems and components; apply safety rules related to materials, processes, and equipment; identify common architectural styles; and identify careers related to construction technology
TDJ4M1	Technological Design	12	University/College	Technological Education	This course provides students with opportunities to solve problems in design through the use of technical drawings, model building, testing, and marketing. Students will research, design, and test solutions for residential or commercial architecture, industrial engineering, and manufacturing. They will also examine the educational requirements of a technical-design—related career in engineering, architecture, or industrial design.
TTJ4C1	Transportation Technology	12	College	Technological Education	This course enables students to further develop technical knowledge and skills as they study, test, service, and repair engine management systems; power trains; steering/control, suspension, brake, and body systems on vehicles, aircraft, and/or watercraft; and/or small engine products. Students will refine communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will expand their awareness of environmental and societal issues related to transportation and their knowledge of apprenticeship and college programs leading

to careers in the transportation industry. Prerequisite: Transportation Technology,

TXJ4E1 Hairstyling 12 Workplace

Technological Education

This course enables students to develop increased proficiency in a wide range of hairstyling and aesthetics services. Working in a salon/spa team environment, students strengthen their fundamental cosmetology skills and develop an understanding of common business practices and strategies in the salon/spa industry. Students expand their understanding of environmental and societal issues and their knowledge of postsecondary destinations in the hairstyling and aesthetics industry.

Prerequisite: Hairstyling and Aesthetics, Grade 11, Workplace Preparation