

COURSE CALENDAR 2019-2020

Stratford Secondary Schools



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SNSS Course Calendar 2019-2020

The Avon Maitland District School Board is committed to ensuring students have the opportunity to graduate secondary school in four years and to ensuring a variety of course offerings for our students. In order to achieve both goals efficiently students need to be registered full time in each semester. Students at Avon Maitland District School Board secondary schools will be required to register with a sufficient number of courses to be considered full time for each semester in which they attend our schools.

Learning Services Department

Stratford Northwestern is committed to inclusive education and aims to support all students in their learning goals. Some students may require extra support for academic success. Special Education Resource Teachers are available to assess special needs and to create an educational plan for students who require remedial help. This plan could include accommodations or ongoing support from resource teachers.

Course Changes: Policies and Procedures

Students wishing to change a course should consult with their Guidance counsellor. Course transfers or changes should occur within the first three weeks of the semester. Students in difficulty should change course pathways as soon as possible in the year. Students are expected to catch up on the work and all previous assignments to ensure an accurate evaluation.

Resource Centre

Northwestern has a large Resource Centre. The Resource Centre includes a large collection of fiction, non-fiction, and reference books. We subscribe to a variety of magazines which are available for leisure reading and research. Desktop computers and wireless computer access are available throughout the Resource Centre.

Extra-Curricular Education

Stratford Northwestern offers a wide variety of extra-curricular activities that take place beyond our regular classrooms. These activities range from athletics, to drama and music, to a large number of clubs and organizations. These activities take place before and after school, during the lunch period and on weekends. We encourage our students to be involved with our out-of-class activities to develop sportsmanship and good citizenship and to grow in self confidence and to learn life long, personal and intrapersonal skills.



Student Responsibilities

A Note to Parents

How can parents help when their student is in secondary school? Often, the courses are unfamiliar to parents and help with homework is much more difficult for parents. The following suggestions will assist the student and build the essential partnership between home and school. Insist that the student attends school regularly and punctually. Valid absences include illness, medical, dental and legal appointments or family emergencies.

Encourage Good Study Habits

Insist that homework is done regularly and on schedule. Students should read, review notes or work on projects. This discipline is the key to scholastic success, according to many educational researchers. Limit employment hours (15 hours per week is considered the upper limit for most students), as well as evening out-of-school activities. Keep in touch! If you have concerns about your son's or daughter's progress, do not hesitate to call the school at 519-271-4500. We will gladly arrange interviews with Administration, Guidance or individual teachers.

Attendance

Students who fail courses or choose to withdraw from a course may jeopardize their attainment of an OSSD. Regular attendance at school is critical for the student's learning and achievement of course expectations

Student Conduct

Each school has a Code of Conduct, which is derived from Ministry of Education and Avon Maitland District School Board policies. It is contained in the booklet "Together for Safe Schools: Code of Conduct" which is available through each school and the Avon Maitland District School Board website at www.yourschools.ca.

Each student at Northwestern is expected to:

- » Respect him/herself and others; strive for personal excellence; follow the rules set by the school, the Avon Maitland District School Board and the Ministry of Education; participate actively and in a positive manner;
- » Arrive on time; arrive with the appropriate materials.
- » Physical, verbal (oral or written), sexual or psychological abuse, bullying, or discrimination on the basis of race, culture, religion, gender, language, disability, sexual orientation, or any other attribute is unacceptable.

Achievement

Students will be assessed and evaluated using a variety of techniques. Each student will receive a Course Information sheet specific to each course, which outlines the evaluation process in that course. A credit will be granted when a student has achieved the expectations of the course. Good work habits are essential for success.

Each student is expected to:

- » Be on time for and present in class;
- » Be prepared for class;
- » Put forth good effort, participate productively in class and complete all assigned work;
- » Behave in a polite and cooperative manner in class, which promotes learning for all students.

Student Fees

There will be no fees or cost charged to students to participate in the regular day school program. Fees may be charged where the student chooses to upgrade the material or where purchase of material is optional. Students enrolled in secondary schools in Avon Maitland District School Board can expect to be provided with the basic classroom learning resources that are required in order to complete the course expectations. It is recognized there may be optional resources that students may purchase to enhance their program; e.g. field trips, upgrading materials in courses such as construction technology and visual arts. Students are expected to come to school ready and willing to participate actively in their own learning. To that end, students are expected to bring materials with them for their own personal note-taking (e.g. pencils, pens, paper, binders). Students are encouraged to purchase their school's student card by paying the student activity fee. The student card includes but is not limited to the benefit of participating in the co-instructional program and in the Student Council dances and activities. The fee may also be used to reduce the total cost of a student's yearbook. Students involved in co-instructional teams, groups and clubs will be made aware of any additional fund-raising obligations or participation fees prior to making a commitment to participate.

French Immersion at Stratford Central Secondary School

The aim of the French Immersion program at Stratford Central Secondary School is to continue to develop and refine students' ability to communicate in French as well as to expand their knowledge of the language through the study of francophone literature. By the end of the four-year program, students will participate easily in conversations and discussions; will be able to take courses at the college or university level in which French is the language of instruction; and will be able to accept



employment in which French is the working language.

The study of French is an important part of the secondary school curriculum. French is not only one of Canada's two official languages, but is also widely used around the world. Through learning a second language, students can strengthen their first-language skills and enhance their critical and creative thinking abilities; they also tend to become more accepting and respectful of other cultures. In addition, the ability to communicate in another language provides students with a distinct advantage in a number of careers, both in Canada and internationally.

Students may work toward a certificate in French Immersion. Students working toward this goal would be required to complete the sequence of four courses in French Immersion Language (FIF) and six courses in other subjects taught in French Immersion. Alternately, students may earn a certificate in Extended French if the student successfully completes the sequence of four courses in French Immersion Language (FIF) and a minimum of three courses in other subjects taught in French Immersion. During the four year program, students are encouraged to seek opportunities to broaden their confidence in the second language through partnerships with our feeder schools, through student exchanges and travel, and through work experiences in French.

Experiential Learning

Schools are offering more opportunities to customize your high school experience and build on your strengths and interests through a variety of new and enhanced learning options through Experiential Learning. Experiential Learning programs such as Cooperative Education, Dual Credits, Ontario Youth Apprenticeship Program (OYAP) and Specialist High Skills Major (SHSM) enhance your academic background and provide you with opportunities to gain valuable experiences in our community.

No matter what your post-secondary pathway may be, experiential learning can assist you in making career decisions and help you develop the knowledge, skills and habits required in the workplace. All forms of experiential learning are a valuable complement to your post-secondary preparation and future employment. Experiential learning is an inquiry-based pedagogical approach that provides opportunities for students to co-construct their learning by participating in rich experiences connected to a community outside school; reflecting on those experiences to derive meaning; and applying their learning to influence their decisions and actions in various aspects of their lives.

Dual Credit Offerings at Conestoga, Fanshawe and Lambton Colleges

What is a Dual Credit Program

Dual credit programs allow senior high school students the opportunity to earn high school and college credits at the same time. Students typically attend Conestoga, Fanshawe or Lambton College's campuses once a week for a fifteen week period. This unique arrangement allows you, the student, the chance to experience life and learning in a college environment and allows you to fast track towards your post-secondary goals.

Examples of dual credit offerings include:

- » Digital Photography
- » Basic Plumbing
- » Basic Electrical
- » Intro to Early Childhood Education
- » Baking & Pastry Arts
- » Health and Wellness Fundamentals
- » Recreation and Leisure

Program availability is subject to change. A maximum of 4 college-delivered dual credits can be counted as optional credits towards the Ontario Secondary School Diploma (OSSD). Dual Credits cannot be used as substitutions for compulsory credit requirements.

What does it cost?

You pay nothing. All books, transportation and tuition are paid for through grants from the School College Work Initiative (SCWI). SCWI is a collaborative partnership between the Ministry of Education and the Ministry of Advanced Education and Skills Development.

What makes a student eligible?

Dual credit programs are intended to assist secondary school students in the completion of their OSSD and provide a successful transition to college and apprenticeship programs. As well, students in Specialist High Skills Major (SHSM) programs and the Ontario Youth Apprenticeship Programs (OYAP) are eligible to enroll. Enrolment in half or full day Co-op allows greater flexibility to participate.



How do I apply?

You **MUST** be referred to the program through your School Student Success Team. Avon Maitland College partners will not accept applications directly.

To find out what dual credit offerings are available and to take advantage of this great opportunity, contact your Guidance Counselor, Student Success teacher or Co-op teacher for an up-to-date listing of course offerings and to obtain an application form. More information can be found at successforlife.ca/dual-credit

Ontario Youth Apprenticeship Program

- » Are you a hands on learner?
- » Do you like to solve problems?
- » Are you good at fixing things?
- » Do you find it difficult to sit in a classroom all day?
- » If you answered yes to any of the above, the apprenticeship pathway may be for you!

Get started on your apprenticeship while in high school. The Ontario Youth Apprenticeship Program (OYAP) allows you to be considered an OYAP Participant and earn cooperative education credits for work experience in an apprenticeable trade. You may or may not be formally registered as an apprentice while attending secondary school. To participate in OYAP you must: be at least 16 years of age, have completed a minimum of 16 credits, be a full-time student working towards completion of your diploma and complete the OYAP participant form.

A student who participates in OYAP must have a Personalized Placement Learning Plan (PPLP) that is based on the on-the-job training requirements outlined in the government approved training standard for that trade. Training Standard competency booklets can be found at INSERT: the Ontario College of Trades website. The OYAP program is funded by the Government of Ontario, Ministry of Advanced Education and Skills Development.

Fast track through an apprenticeship now and take advantage of Dual Credit and Specialist High Skills Major opportunities. See your Guidance Counsellor or Coop teacher to apply. For more information, visit successforlife.ca/oyap and oyap.com.

Specialist High Skills Majors

The SHSM is a specialized program that allows students to focus their learning on a specific economic sector while meeting the requirements for the Ontario Secondary School Diploma (OSSD) and assist in their transition from secondary school to apprenticeship training, college, university, or the workplace. The Specialist High Skills Major programs allow students to focus on a career path that matches their

skills and interests. Visit www.successforlife.ca to view the SHSM sectors available at this school.

Every SHSM must include the following five components:

- » A bundle of 8-10 Grade 11 and 12 courses in the selected field that includes 2 cooperative education credits
- » Sector-recognized certifications and/or training courses
- » Experiential learning activities within the sector
- » Reach Ahead experiences connected with the student's chosen post-secondary pathway
- » Completion of Sector Partnered Contextualized Experience (SPCE) in ICE (Innovation, Creativity, Entrepreneurship), mathematical literacy or coding

Benefits to students enrolled in a SHSM program:

- » Customize their secondary school education to suit their interests and talents.
- » Develop specialized knowledge and skills.
- » Earn credits that post-secondary educational institutions and the sector recognize.
- » Gain sector-recognized certifications and career-relevant training.
- » Identify, explore and refine career goals and make informed decisions about their future.
- » Remain flexible, with the option to shift between pathways, should their goals and plans change.

Cooperative Education

Cooperative Education is a program that offers students the opportunity to extend classroom learning into supervised learning experiences in the community. Students can earn secondary school credits, which are related to specific school subjects in school as well as a dedicated Cooperative Education course. Cooperative Education programs combine a work placement component in the community, along with a classroom component. The classroom component includes a session prior to attending a placement in the community where students will engage in health and safety and well being training.

Cooperative Education courses can be selected in either a 2-credit or 4-credit package, depending upon the individual student's timetable and the type of placement and experience desired. Students interested in Cooperative Education must complete a cooperative education application form and interview with the cooperative education teacher prior to starting a co-op course. The student needs to demonstrate maturity,



a positive attitude, an ability to be punctual and maintain regular attendance and a willingness to learn. Students must also be prepared to adhere to the policies of the workplace and school and follow health and safety regulations at the workplace. Placements are subject to availability in the community. Students are encouraged to discuss their placement choices with a Co-op teacher when registering.

Coop Course Notes:

- » Summer School Co-op is an option for students enrolled in a Specialist High Skills Major
- » SHSM candidates may use up to 4 Co-op credits towards their bundle of SHSM requirements.
- » 2 co-op credits are required in the SHSM Credit Bundle. Co-op tie-in must be within the approved bundle of credits (GLC2O is also available to be used).
- » 1 additional co-op credit can be substituted for one Major credit. Co-op tie-in must be within the approved bundle of credits.
- » 1 additional Co-op credit can be substituted for one other required credit. Co-op tie-in must be within the approved bundle of credits.

Arts SHSM

Arts and Culture enables students to build a foundation of sector-focused knowledge and skills before graduating and entering apprenticeship training, college, university, or an entry-level position in the workplace. Where local circumstances allow, boards may elect to offer one or more variants of the SHSM in a given sector, each with a particular area of focus. This SHSM may be designed to have a particular focus – for example, on dance, dramatic arts management or technical production. This focus is achieved through the selection of the four major credits in the bundle.

Energy SHSM

Energy is an emerging and expanding sector that encompasses all aspects of energy generation, distribution, and consumption, including research and development, design, construction, installation, and maintenance. Core industries in this sector include: renewable and alternative energy such as wind, solar, biomass, power generation and distribution, fossil fuels and energy efficiency. Students enrolled in the Energy SHSM will be involved in today's rapid and exciting changes in green energy technologies. They will have the opportunity to solve some of the most pressing issues facing modern societies, while having good prospects for a varied career in a dynamic sector.

Environment SHSM

The SHSM–Environment enables students to build a foundation of sector-focused knowledge and skills before graduating and entering apprenticeship training, college, university, or an entry-level position in the workplace.

Employment in the environment sector has boomed in recent years, and, according to industry experts, existing labour shortages in this sector are expected to increase as regulations to meet Canada’s goals regarding climate change come into effect.

Health & Wellness SHSM

This program emphasizes skills in the Health & Wellness sector. Students develop knowledge and skills in Leadership, Parenting, Social Sciences and Humanities, Sciences, Fitness and Cosmetology. This program prepares our students for either employment or post-secondary training at the college or university level.

Hospitality & Tourism SHSM

This program emphasizes skills in the culinary arts. Students gain skills in food costing, menu planning, restaurant services, catering, event and activity planning, management techniques, nutrition, cooking and baking. Graduates will be able to proceed directly into the workforce, start an apprenticeship or enroll in related college or university programs.

Information and Communications SHSM

Students enrolled in the SHSM–Information and Communications Technology will be involved in today’s rapid and exciting changes in technology and will contribute to new and emerging media and technologies in the years to come.

The SHSM–Information and Communications Technology enables students to build a foundation of sector-focused knowledge and skills before graduating and entering apprenticeship training, college, university, or an entry-level position in the workplace. Depending on local circumstances, this SHSM may be designed to have a particular focus – for example, on communication systems, computer systems, or software and digital media.

Manufacturing SHSM

This program focuses on designing, planning, costing, manufacturing and marketing real-life, hands-on projects to produce industry standard products. While working on these projects the students are actively engaged in learning a variety of skills such as Autocad, Mastercam, all disciplines of welding and precision machining. This program prepares our students for either employment or post-secondary training at an advanced level.



Transportation SHSM

Transportation Technology is an activity based program focusing on the repair and maintenance of vehicles. In addition to this, the High Skills Program offers students the opportunity to study and test the components of the vehicle. The program also focuses on servicing of farm and other heavy equipment. Students diagnose and repair vehicle malfunctions and are expected to make repairs to industry standards, as many of the vehicles repaired are customer owned and operated. This also gives students practice in customer relations.

Avon Maitland District eLearning Centre

AMDEC is a fully online secondary school within the Avon Maitland DSB, which offers courses from grade 9 to grade 12 in most subject areas. Our courses are taught by experienced AMDSB teachers who are committed to student success through a quality eLearning experience. Your success as a student is also supported by our principal, vice principal, guidance counsellor, technical help department, office staff and the home school. We believe that our program provides an excellent educational opportunity for all of our students.

AMDEC delivers semestered, as well as non-semestered continuous intake courses. With the permission of your home school, you may start AMDEC courses any time between September and mid-February, but all students must finish by early June. You have some flexible deadlines for your assignments; however, you are responsible for establishing a schedule that meets both AMDEC's due dates and your own needs (for example, completing the course by the end of first semester or meeting postsecondary mark submission deadlines). Module completion requirements and a list of important due dates are posted in the Student Handbook and are also available on our website: www.amdec.ca.

Students wishing to take an AMDEC course must register through the guidance department of their home school. You may consider eLearning courses for a number of reasons: to take a course that is not offered at your home school; to solve a timetable conflict; and to experience eLearning before starting post-secondary education. To succeed in eLearning you need skills in: self-motivation, organization, self-direction, time management, computer proficiency, and honesty.

Course Selections 2019-2020

The Arts

Dance

ATC10

Dance

Grade 9, Open

This course gives students the opportunity to explore their technical and compositional skills by applying the elements of dance and the tools of composition in a variety of performance situations. Students will generate movement through structured and unstructured improvisation, demonstrate an understanding of safe practices with regard to themselves and others in the dance environment, and identify the function and significance of dance within the global community.

ATC20

Dance

Grade 10, Open

This course emphasizes the development of students' technique and creative skills relating to the elements of dance and the tools of composition in a variety of performance situations. Students will identify responsible personal and interpersonal practices related to dance processes and production, and will apply technologies and techniques throughout the process of creation to develop artistic scope in the dance arts.

ATC3M

Dance

Grade 11, University/College Preparation

This course emphasizes the development of students' artistry, improvisational and compositional skills, and technical

proficiency in global dance genres from around the world. Students will apply dance elements, techniques, and tools in a variety of ways, including performance situations; describe and model responsible practices related to the dance environment; and reflect on how the study of dance affects personal and artistic development.

Prerequisite: ATC10 or ATC20

ATC4M

Dance

Grade 12, University/College Preparation

This course emphasizes the development of students' technical proficiency, fluency in the language of movement in dance genres from around the world, and understanding of dance science. Students will explain the social, cultural, and historical contexts of dance; apply the creative process through the art of dance in a variety of ways; and exhibit an understanding of the purpose and possibilities of continuing engagement in the arts as a lifelong learner.

Prerequisite: ATC3M

Dramatic Arts

ADA10

Dramatic Arts

Grade 9, Open

This course provides opportunities for students to explore dramatic forms and techniques, using material from a wide range of sources and cultures. Students will use the elements of drama to examine situations and issues that are relevant to their lives. Students will create, perform, discuss, and analyse drama, and then reflect on the experiences to develop an understanding of themselves, the art form, and the world around them.

ADA2O**Dramatic Arts****Grade 10, Open**

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.

ADA3M**Dramatic Arts****Grade 11, University/College Preparation**

This course requires students to create and to perform in dramatic presentations. Students will analyze, 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 analyze the functions of playwrights, directors, actors, designers, technicians, and audiences.

Prerequisite: Dramatic Arts, Grade 9 or 10

ADA4M**Dramatic Arts****Grade 12, University/College Preparation**

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 texts 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 analyze how the knowledge and skills developed in drama are related to their personal skills, social awareness, and goals

beyond secondary school.

Prerequisite: ADA3M

Instrumental Music**AMG2O****Music****Grade 10, Open**

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. This is a course in guitar music.

AMG3O**Music****Grade 11, Open**

This course will focus on the playing of the guitar, including electric and rock band repertoire. Students will develop musical literacy through performance, preparation, and 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 analyse music from various genres and will develop skills transferable to other aspects of their life and careers.

Prerequisite: Music, Grade 11 AMG3O

AMG4M**Music****Grade 12, University/College Preparation**

This course will focus on the playing of the guitar, including electric and rock band repertoire. Students will develop musical literacy through performance, preparation, and 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 analyse music from various genres and will develop skills transferable to other aspects of their life and careers.

AMI1O**Instrumental Music****Grade 9, Open**

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. Students will learn to play a woodwind or brass instrument and the course is open to all Grade 9 students regardless of musical background.

Recommended preparation: AMI1O

AMI2O**Instrumental Music****Grade 10, Open**

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. This course emphasizes music performance on a band instrument.

Prerequisite: AMI1O or AMI2O (both strongly recommended)

AMI3M**Instrumental Music****Grade 11, University/College Preparation**

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. They will continue to increase their understanding of the elements of music while developing their technical and imaginative abilities.

Prerequisite: AMI3M

AMI4M**Instrumental Music****Grade 12, University/College Preparation**

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. They will also complete complex creative projects.

Prerequisite: AMI1O or AMI2O (both recommended); Co-requisite: AMI3M, AMR3M

AMH3M, (0.5 Credit)**Stage-Band Music****Grade 11, University/College Preparation Part 1**

This half-credit course focuses on jazz technique and the performance of jazz music. 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: AMI3M, AMR3M or AMH3M;

Co-requisites: AMI4M, AMR4M

AMH4M**Stage-Band Music****Grade 12, University/College Preparation Part 2**

This course focuses on jazz technique and the performance of jazz music. 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.

Co-requisite: AMI2O

AMR2O, (0.5 Credit)**Repertoire****Grade 10, Open**

This half-credit course focuses on the performance of Symphonic Band repertoire. 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.

Prerequisite: AMI1O or AMI2O (both recommended); Co-requisite: AMI3M

AMR3M, (0.5 Credit)**Repertoire****Grade 11, University/College Preparation Part 1**

This half-credit course focuses on the performance of Symphonic Band repertoire. 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 analyzing 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: AMI3M; Co-requisite: AMI4M

AMR4M**Repertoire****Grade 12, University/College Preparation Part 2**

This course focuses on the performance of Symphonic Band repertoire. 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: Any Grade 9 or 10 Arts, Recommended prerequisite: Media Arts, Grade 10

Media Arts**ASM2O****Media Arts****Grade 10, Open**

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 communications 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.

ASM3O**Media Arts****Grade 11, Open**

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: Media Arts, Grade 11 University/College Preparation

ASM4M**Media Arts****Grade 12, University/College Preparation**

This course emphasizes the refinement of media arts skills through the creation of a thematic body of work by applying traditional and emerging technologies, tools, and techniques such as multimedia,

computer animation, installation art, and performance art. Students will develop works that express their views on contemporary issues and will create portfolios suitable for use in either career or postsecondary education applications. Students will critically analyse the role of media artists in shaping audience perceptions of identity, culture, and community values.

Visual Arts

AVI10

Visual Arts

Grade 9, Open

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.

AVI20

Visual Arts

Grade 10, Open

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.

**Prerequisite: Any Grade 9 or 10 Arts,
Recommended prerequisite: Visual Arts,
Grade 10**

AVI3M

Visual Arts

Grade 11, University/College Preparation

This course enables students to further develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, and printmaking, as well as the creation of collage, multimedia works, and works using emerging technologies. Students will use the critical analysis process when evaluating their own work and the work of others. The course may be delivered as a comprehensive program or through a program focused on a particular art form (e.g., photography, video, computer graphics, information design).

**Prerequisite: Any Grade 9 or 10 Arts,
Recommended prerequisite: Visual Arts,
Grade 10**

AVI3O

Visual Arts

Grade 11, Open

This course focuses on studio activities in the visual arts, including drawing, painting, sculpture, photography, printmaking, collage, and/or multimedia art. Students will use the creative process to create art works that reflect a wide range of subjects and will evaluate works using the critical analysis process. Students will also explore works of art within a personal, contemporary, historical, and cultural context.

**Prerequisite: Visual Arts, Grade 11,
University/College Preparation**

AVI4M

Visual Arts

Grade 12, University/College Preparation

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: AVI10 or AVI20

AWE30

**Visual Arts: Information/Consumer Design
Grade 11, Open**

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 using specific criteria. 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. Studio activities will focus on the graphic arts of advertising, logo design, magazine layout, digital photography, symbolism and values.

Prerequisite: AVI10 or AVI20

AWM3M

**Visual Arts: Drawing and Painting
Grade 11, University/College Preparation**

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. Skeletal and muscular studies of human anatomy will

figure prominently. Studio projects using line, value, colour, texture and composition will involve life drawing, limited portraiture, partial and full body casting while art history components will concentrate on how the depiction of the human form evolved throughout the centuries.

Prerequisite: AVI3M or AWM3M

AWK4M

**Visual Arts: Illustration
Grade 12, 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 analyzing 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. Studio activities include figures in motion, facial close ups, technical illustrations, conventional story-boards, caricatures, book cover illustrations, fashion designs and designing a complete, illustrated storybook.

Recommended preparation: AMV10

Vocal/Choral Music

AMV10

**Music - Vocal/Choral
Grade 9, Open**

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. Students will explore the vast repertoire of vocal and choral music ranging from the Middle Ages to the present, from Gregorian Chant to vocal jazz, with special attention given to Canadian folk music.

AMV2O

Music - Vocal/Choral

Grade 10, Open

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. There will also be an emphasis on sight-singing, solo and choral repertoire.

Prerequisite: AMV1O or AMV2O

AMV3M

Music - Vocal/Choral

Grade 11, University/College Preparation

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. Independently and in groups, they will also plan, market, and produce music productions, making use of appropriate technology, and will evaluate the results.

Business

BTT1O

Information and Communication Technology in Business

Grade 9, Open

This 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 word processing, spreadsheet, database, desktop publishing, presentation software, and website design skills. Throughout the course, there is an emphasis on digital literacy, effective electronic research and communication skill, and current issues related to the impact of information and communication technology.

BBI2O

Introduction to Business

Grade 10, Open

This course introduces students to the world of business. Students will develop an understanding of the functions of business, including accounting, marketing, information and communication technology, human resources, and production, and of the importance of ethics and social responsibility. This course builds a foundation for further studies in business and helps students develop the business knowledge and skills they will need in their everyday lives.

BMI3C**Marketing: Goods, Services, Events
Grade 11, College Preparation**

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.

BAF3M**Financial Accounting Fundamentals
Grade 11, University/College Preparation**

This course introduces students to the fundamental principles and procedures of accounting. Students will develop financial analysis and decision-making skills that will assist them in future studies and/or career opportunities in business. Students will acquire an understanding of accounting for a service and a merchandising business, computerized accounting, financial analysis, and current issues and ethics in accounting.

BMX3E**Marketing: Retail and Service
Grade 11, Workplace Preparation**

This course focuses on marketing activities in the retail and service sectors. Students will examine trends and global influences on marketing decisions, and will learn about the importance of customer service in developing a customer base and maintaining customer loyalty. Through hands-on learning, students will develop personal selling and information technology skills that will prepare them for a variety of marketing-related positions in the workplace.

BBB4M**International Business Fundamentals
Grade 12, University/College Preparation**

This course provides an overview of the importance of international business and trade in the global economy and explores the factors that influence success in international markets. Students will learn about the techniques and strategies associated with marketing, distribution, and managing international business effectively. This course prepares students for post-secondary programs in business, including international business, marketing, and management.

BOH4M**Business Leadership: Management
Fundamentals
Grade 12, University/College Preparation**

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

IDC4M**Sports and Entertainment Marketing
Grade 12, University/College Preparation**

Sports and Entertainment Marketing is a one-credit specialized course designed to offer students an opportunity to gain knowledge and develop skills related to the growing sports and entertainment industry. Sports Marketing addresses diverse products including sporting events, athletes, sport facilities or locations, sporting goods, personal training and sports information. Entertainment Marketing focuses on events such as concerts, fairs, trade shows, festivals, plays, product launches and causes.

ICS3C**Introduction to Computer Programming
Grade 11, College Preparation**

This course introduces students to computer programming concepts and practices. Students will write and test computer programs, using various problem-solving strategies. They will learn the fundamentals of program design and apply a software development life-cycle model to a software development project. Students will also learn about computer environments and systems, and explore environmental issues related to computers, safe computing practices, emerging technologies, and post secondary opportunities in computer-related fields.

ICS3U**Introduction to Computer Science
Grade 11, University Preparation**

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

Prerequisite: Introduction to Computer Programming, Grade 11, College Preparation

ICS4C**Computer Programming
Grade 12, College Preparation**

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. Students will also investigate ethical issues in computing and expand their understanding of environmental issues, emerging technologies, and computer-related careers.

Prerequisite: Introduction to Computer Science, Grade 11, University Preparation

ICS4U**Computer Science
Grade 12, University Preparation**

This course enables students to further develop knowledge and skills in computer science. Students will use modular design principles to create complex and fully documented programs, according to industry standards. Student teams will manage a large software development project, from planning through to project review. Students will also analyze 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.

Canadian & World Studies**CGC1D****Issues in Canadian Geography
Grade 9, Academic**

This course examines interrelationships within and between Canada's natural and human systems and how these systems interconnect with those in other parts of the world. Students will explore environmental, economic, and social geographic issues relating to topics such

as transportation options, energy choices, and urban development. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate various geographic issues and to develop possible approaches for making Canada a more sustainable place to live.

CGC1DE

Issues in Canadian Geography Grade 9, Academic, Enriched

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. The academic curriculum will be enriched through the in depth study of selected topics and individually tailored projects.

CGC1P

Issues in Canadian Geography Grade 9, Applied

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.

Prerequisite: Canadian Geographic Issues, Grade 9, Academic or Applied

CGG30

Travel and Tourism: A Geographical Perspective Grade 11, Open

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.

Prerequisite: Canadian Geographic Issues, Grade 9, Academic or Applied

CGW4C

World Issues: A Geographic Analysis Grade 12, College Preparation

This course explores the global challenge of meeting the basic needs of all people while sustaining the natural environment. Students will examine global inequities, including those related to food, water, energy, and development, and will explore global issues through environmental, social, economic, and political lenses. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate a range of current geographic issues facing Canada and

the world.

Prerequisite: Any university or university/college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities

CGW4U

**World Issues: A Geographic Analysis
Grade 12, University Preparation**

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, university/college, or college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities.

CGR4M

**The Environment and Resource
Management**

Grade 12, University/College Preparation

This course investigates interactions between natural and human systems, with a particular emphasis on the impacts of human activity on ecosystems and natural processes. Students will use the geographic inquiry process, apply the the concepts of geographic thinking, and employ a variety of spatial skills and technologies to analyse these impacts and propose ways of reducing them. In the course of their investigations, they will assess resource management and sustainability practices, as well as related government policies and international accords. They will also consider questions

of individual responsibility and environmental stewardship as they explore ways of developing a more sustainable relationship with the environment.

CHV2O, (0.5 Credit)

Civics and Citizenship

Grade 10, Open

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.

CHC2D

**Canadian History Since World War I
Grade 10, Academic**

This course explores social, economic, and political developments and events and their impact on the lives of different groups in Canada since 1914. Students will examine the role of conflict and cooperation in Canadian society, Canada's evolving role within the global community, and the impact of various individuals, organizations, and events on Canadian identity, citizenship, and heritage. They will develop their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating key issues and events in Canadian history since 1914.

CHC2DE**Canadian History Since World War I
Grade 10, Academic, Enriched**

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. The academic curriculum will be enriched through the in depth study of selected topics and individually tailored projects.

CHC2L**Canadian History
Grade 10, Locally Developed, Compulsory**

This course focuses on the connections between the student and key people, events, and themes in Canadian history from World War I to the present. Students prepare for the Grades 11 and 12 Workplace Preparation history courses through the development and extension of historical literacy and inquiry skills. Students explore a variety of topics highlighting individuals and events that have contributed to the story of Canada. The major themes of Canadian identity, internal and external relationships, and changes since 1914, are explored through guided investigation. Students have the opportunity to extend analytical skills with a focus on identifying and interpreting events and perspectives and making connections. Students practice reading, writing, visual, and oral literacy skills, and mathematical literacy

skills to identify and communicate ideas in a variety of forms.

CHC2P**Canadian History Since World War I
Grade 10, Applied**

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: CHC2D or CHC2P

CHA3U**American History
Grade 11, University Preparation**

This course traces the social, economic, and political development of the United States from colonial times to the present. Students will examine issues of diversity, identity and culture that have influenced the country's social and political formation and will consider the implications of its expansion into a global superpower. Students will use critical-thinking and communication skills to determine causal relationships, evaluate multiple perspectives, and present their own points of view.

Prerequisite: CHC2D or CHC2P or a locally developed compulsory course (LDCC)

CHT3O**World History Since 1900: Global and Regional Perspective****Grade 11, Open**

This course focuses on major developments in world history from 1900 to the present. Students will explore the causes and consequences of global and regional conflicts as well as responses to social, economic, and political developments in various countries and regions. 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 historical developments and events, including those that continue to affect people in various parts of the world.

Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied

CHW3M**World History to the End of the Fifteenth Century****Grade 11, University/College Preparation**

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, or a locally developed compulsory course (LDCC)

CHM4E**Adventures in World History
Grade 12, Workplace Preparation**

This course examines significant developments and events in world history from earliest times to the present. Students will explore social, economic, and political forces in different times and places, and how technology, art, and religion have helped shape people's lives and identities. Students will apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating a variety of human experiences in world history.

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

CHY4C**World History Since the Fifteenth Century
Grade 12, College Preparation**

This course explores key developments and events in world history since approximately 1450, with a focus on interactions within and between various regions. Students will examine social, economic, and political developments and how they have affected different peoples. 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 key turning points in world history and historical forces that have shaped our world.

Prerequisite: Any university or university/college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities.

CHY4U**World History Since The Fifteenth Century
Grade 12, University Preparation**

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: Canadian History since World War I, Grade 10, Academic or Applied

CLU3M**Understanding Canadian Law
Grade 11, University/College Preparation**

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, or a locally developed compulsory course (LDCC)

CLU3E**Understanding Canadian Law In Everyday
Life****Grade 11, Workplace Preparation**

This course enables students to develop a

practical understanding of laws that affect the everyday lives of people in Canada, including their own lives. Students will gain an understanding of the need for laws, and of their rights, freedoms, and responsibilities under Canadian law. Topics include laws relating to marriage, the workplace, cyberbullying, and the processing of criminal offences. Students will apply the concepts of legal thinking and the legal inquiry process, and will begin to develop legal reasoning skills and an understanding of Canadian law.

Prerequisite: Any university or university/college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities

CLN4U**Canadian and International Law
Grade 12, University Preparation**

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

CPW4U**Canadian and World Politics
Grade 12, University Preparation**

This course examines Canadian and world. This course explores various perspectives on issues in Canadian and world politics. Students will explore political decision-making and ways in which individuals, stakeholder groups, and various institutions, including different levels of government, multinational corporations, and non-governmental organizations, respond to and work to influence domestic and international developments. Students will apply the concepts of political thinking and the political inquiry process to investigate current political policies, issues, and events, and to develop and communicate informed opinions about them.

IDC4O**Interdisciplinary Studies
Grade 12, Open**

This course emphasizes the development of practical skills and knowledge to solve problems, make decisions, create personal meaning, and present findings beyond the scope of a single subject or discipline. Through individual and collaborative inquiry and research into contemporary issues, real-life situations, and careers, students will apply the principles and skills derived from the complementary subjects and disciplines studied, evaluate the reliability of information, and examine how information technology can be used safely, effectively, and legally. They will also learn how to select strategies to define problems, research alternative solutions, assess their thinking in reaching decisions, and adapt to change as they acquire new knowledge.

Prerequisites: any university or university/college preparation course

IDC4U**Interdisciplinary Studies
Grade 12, University Preparation**

This course will help students develop and consolidate the skills required for and knowledge of different subjects and disciplines to solve problems, make decisions, create personal meaning, and present findings beyond the scope of a single subject or discipline. Students will apply the principles and processes of inquiry and research to effectively use a range of print, electronic, and mass media resources, to analyse historical innovations and exemplary research; and to investigate real-life situations and career opportunities in interdisciplinary endeavours. They will also assess their own cognitive and affective strategies, apply general skills in both familiar and new contexts, create innovative products, and communicate new knowledge.

Prerequisites: any university or university/college preparation course

Cooperative Education

Cooperative Education Linked to a Related Course (or Courses)

This course consists of a community-connected experience 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 at school and beyond, today and in the future, as well as in their education and career/life planning. Within the context of the community-connected experience, 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.

Prerequisite: None

DCO30

Creating Opportunities through Co-op Grade 11, Open

(This course is to be chosen in conjunction with the Co-op Teacher at beginning of semester) This course consists of a community-connected experience and a cooperative education curriculum focused on developing skills, knowledge, and habits of mind that will support students in their learning at school and beyond, today and in the future, as well as in their education and career/life planning. Within the context of the community-connected experience, students will apply skills, knowledge, and habits of mind that will protect and promote their health, safety, and well-being and that will strengthen their inquiry, decision-making, and leadership skills. Students 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.

English

ENG1D

English

Grade 9, Academic

This course is designed to develop the oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. Students

will analyze 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.

ENG1DE

English

Grade 9, Academic, Enriched

This course is designed to develop the oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. Students will analyze 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. This course also provides students with an opportunity to extend and enrich their learning through a self-directed unit, which allows them to explore aspects of English of interest to them.

ENG1L

English

Grade 9, Locally Developed

This course provides foundational literacy and communication skills to prepare students for success in their daily lives, in the workplace, and in the Grade 10 LDCC Course. The course is organized into strands

that develop listening and talking skills, reading and viewing skills, and writing skills. In all strands, the focus is on developing foundational literacy skills and on using language clearly and accurately in a variety of authentic contexts. Students develop strategies and put into practice the processes involved in talking, listening, reading, viewing, writing, and thinking, and reflect regularly upon their growth in these areas.

ENG1P
English
Grade 9, Applied

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 applied English course, which leads to college or workplace preparation courses in Grades 11 and 12.

Prerequisite: English, Grade 9, Academic or Applied

ENG2D
English
Grade 10, Academic

This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. Students will analyze literary texts from contemporary and historical periods, interpret and evaluate informational and graphic texts, and create oral, written, and media texts in a variety of

forms. An important focus will be on the selective use of strategies that contribute to effective communication. This course is intended to prepare students for the compulsory Grade 11 university or college preparation course.

Prerequisite: English, Grade 10, Applied

ENG2DE
English
Grade 10, Academic, Enriched

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 analyze literary texts from contemporary and historical periods, interpret and evaluate informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on the selective use of strategies that contribute to effective communication. This course is intended to prepare students for the compulsory Grade 11 university or college preparation course. This course also provides students with an opportunity to extend and enrich their learning through a self-directed unit, which allows them to explore aspects of English of interest to them.

Prerequisite: a Grade 9 English credit

ENG2L
English
Grade 10, Locally Developed

In this course, students focus on extending their literacy and communication skills to prepare for success in their daily lives, in the workplace, in the English, Grade 11, Workplace Preparation course, or in the English: Contemporary Aboriginal Voices, Grade 11, Workplace Preparation course. The course is organized into 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.

Prerequisite: English, Grade 9, Academic or Applied

ENG2P
English
Grade 10, Applied

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.

Prerequisite: English, Grade 9, Academic or Applied

IDC3O
Media (Film) Studies
Grade 11, Open

With a sole focus on film, this course emphasizes the knowledge and skills that will enable students to understand this genre of media communication from a historical and contemporary perspective. Students will be given multiple opportunities to view, understand, analyse and create film. Students are encouraged to experiment with the forms, genres, conventions, and languages of film and other media texts so they can

decide which media forms are appropriate for which audiences and purposes. The course invites students to experiment with a variety of roles within the film industry so they can determine the level and degree of participation they prefer to pursue in their post-secondary media studies.

Prerequisite: English, Grade 10, Applied

ENG3C
English
Grade 11, College Preparation

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will 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.

Prerequisite: English, Grade 10, Applied or Locally Developed

ENG3E
English
Grade 11, Workplace Preparation

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.

Prerequisite: English, Grade 10, Academic

ENG3U

English

Grade 11, University Preparation

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze challenging literary texts from various periods, countries, and cultures as well as a range of informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on using language with precision and clarity and incorporating stylistic devices appropriately and effectively. The course is intended to prepare students for the compulsory Grade 12 university or college preparation course.

Prerequisite: English, Grade 10, Academic

ENG3UE

English

Grade 11, University Preparation, Enriched

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze 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. This course also provides students with an opportunity to extend and enrich their learning through

a self-directed unit, which allows them to explore aspects of English of interest to them.

Prerequisite: English, Grade 11, College Preparation

ENG4C

English

Grade 12, College Preparation

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze a variety of informational and graphic texts, as well as literary texts from various countries and cultures, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity and developing greater control in writing. The course is intended to prepare students for college or the workplace.

Prerequisite: English, Grade 11, Workplace Preparation

ENG4E

English

Grade 12, Workplace Preparation

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 analyze 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.

Prerequisite: English, Grade 11, University Preparation

ENG4U
English
Grade 12, University Preparation

This course emphasizes the consolidation of the literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. An important focus will be on using academic language coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. The course is intended to prepare students for university, college, or the workplace.

Prerequisite: English, Grade 11, University Preparation

EWC4U
The Writer's Craft
Grade 12, University Preparation

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.

(Students who have already met the literacy requirement for graduation may be eligible to take the course under special circumstances, at the discretion of the principal.)

OLC4O
Ontario Secondary School Literacy Course,
Grade 12, Open

This course is designed to help students acquire and demonstrate the cross-curricular literacy skills that are evaluated by the Ontario Secondary School Literacy Test (OSSLT). Students who complete the course successfully will meet the provincial literacy requirement for graduation. Students will read a variety of informational, narrative, and graphic texts and will produce a variety of forms of writing, including summaries, information paragraphs, opinion pieces, and news reports. Students will also maintain and manage a portfolio containing a record of their reading experiences and samples of their writing. Eligibility requirements: Students who have been eligible to write the OSSLT at least once and who have been unsuccessful are eligible to take the course. *(Students who have already met the literacy requirements for graduation may be eligible to take the course under special circumstances, at the discretion of the principal.)*

French Immersion

CGC1DF
Enjeux géographiques du Canada
9e, Théorique

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.

Note: This course is not available in 2019-20.

FIF1D

French Immersion

9e, Théorique

This course provides opportunities for students to speak and interact in French independently in a variety of real-life and personally relevant contexts. Students will develop their ability to communicate in French with confidence by using language-learning strategies introduced in the elementary French Immersion program. Students will enhance their knowledge of the language through the study of French-Canadian literature. They will also continue to increase their understanding and appreciation of diverse French-speaking communities and to develop the skills necessary to become life-long language learners.

Prerequisite: Minimum of 3800 hours of French instruction, or equivalent.

FIF1P

French Immersion

9e, Appliqué

This course provides opportunities for students to communicate and exchange information in French in a variety of real-life situations, with support as appropriate. Students will develop the key listening, speaking, reading, and writing skills introduced in the elementary French Immersion program. They will also increase their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

CHC2DF

Histoire du Canada depuis la Première Guerre mondiale

10e, Théorique

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.

Note: French Immersion students in grades 9 and 10 should take this course in 2019-20.

CHV2OF, (0.5 Cr dit)

Civisme et citoyennet 

10e, Ouvert

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: FIF1D

FIF2D**French Immersion****10e, Théorique**

This course provides students with extensive opportunities to communicate, interact, and think critically and creatively in French. Students will use a variety of language-learning strategies in listening, speaking, reading, and writing, and will respond to and interact with print, oral, visual, and electronic texts. Students will develop their knowledge of the French language through the study of contemporary and historically well-known French European literature. They will also continue to increase their understanding and appreciation of diverse French-speaking communities and to develop the skills necessary to become life-long language learners.

Prerequisite: FIF1D or FIF1P

FIF2P**French Immersion****10e, Appliqué**

This course emphasizes the development and use of skills and strategies in communication and interaction in French. Students will acquire literacy skills by using creative and critical analysis processes in listening, speaking, reading, and writing in real-life contexts. They will also increase their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

Note: French Immersion students in grades 9 and 10 should take this course in 2019-20.

GLC2OF, (0.5 Cr dit)

Exploration de carri re**10e, Ouvert**

This course teaches students how to develop and achieve personal goals for

future learning, work, and community involvement. Students will assess their interests, skills, and characteristics and investigate current economic and workplace trends, work opportunities, and ways to search for work. The course explores postsecondary learning and career options, prepares students for managing work and life transitions, and helps students focus on their goals through the development of a career plan.

Prerequisite: FIF2D

FIF3U**French Immersion****11e, Th orique**

This course provides opportunities for students to consolidate the communication skills required to speak and interact with increasing confidence and accuracy in French in a variety of academic and social contexts. Students will apply language-learning strategies while exploring a variety of concrete and abstract topics, and will increase their knowledge of the language through the study of French literature from around the world. They will also continue to deepen their understanding and appreciation of diverse French-speaking communities and to develop the skills necessary to become life-long language learners.

HFC3MF**French Immersion****11e, Pr universitaire/Pr coll gial**

This course focuses on the flavours, aromas, cooking techniques, foods, and cultural traditions of world cuisines. Students will explore the origins of and developments in diverse food traditions. They will demonstrate the ability to cook with ingredients and equipment from a variety of cultures, compare food-related etiquette in many countries and cultures, and explain

how Canadian food choices and traditions have been influenced by other cultures. Students will develop practical skills and apply social science research methods while investigating foods and food practices from around the world.

Prerequisite: FIF3U

FIF4U

French Immersion 12e, Préuniversitaire

This course provides students with extensive opportunities to communicate, interact, and think critically and creatively in French. Students will consolidate language-learning strategies and apply them while communicating about concrete and abstract topics, and will independently respond to and interact with a variety of oral and written texts. Students will study a selection of French literature from the Middle Ages to the present. They will also continue to enrich their understanding and appreciation of diverse French-speaking communities and to develop the skills necessary to become life-long language learners.

Prerequisites: Any university or university/college preparation course. Note: This course may run depending on enrollment.

IDC4OF-IDC4UF

Études interdisciplinaires 12e, Préuniversitaire/Précollégial

This course will help students develop and consolidate the skills required for and knowledge of different subjects and disciplines to solve problems, make decisions, create personal meaning, and present findings beyond the scope of a single subject or discipline. Students will apply the principles and processes of inquiry and research to effectively use a range of print, electronic, and mass media resources; to analyse historical innovations

and exemplary research; and to investigate real-life situations and career opportunities in interdisciplinary endeavours. They will also assess their own cognitive and affective strategies, apply general skills in both familiar and new contexts, create innovative products, and communicate new knowledge.

Guidance & Career Education

GLC20, (0.5 Credit)

Career Studies

Grade 10, Open

This course teaches students how to develop and achieve personal goals for future learning, work, and community involvement. Students will assess their interests, skills, and characteristics and investigate current economic and workplace trends, work opportunities, and ways to search for work. The course explores postsecondary learning and 13 career options, prepares students for managing work and life transitions, and helps students focus on their goals through the development of a career plan.

Health & Physical Education

PPL1OFE

Healthy Active Living Education

Grade 9, Female, Open

This course equips students with 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 provides 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.

PPL1OMA

Healthy Active Living Education

Grade 9, Male, Open

This course equips students with 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 provides 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.

PAL2O

Hockey Skills Academy

Grade 10, Open

The Hockey Skills Course will feature on-ice training and classroom learning with an individualized fitness component. Students receive on-ice instruction combined with off-ice fitness, health and nutrition training that will be specifically designed to meet the needs of each participant. Both the on-ice and off-ice training will be delivered in a manner that will allow for differentiated instruction to ensure that all skill levels can participate with a focus on individual improvement.

PAF2OFE

Healthy Living and Personal and Fitness Activities

Grade 10, Female, Open

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. Activities will emphasize personal fitness activities including step and low impact aerobics, fitness walking, resistance training, aqua-fit, yoga and self-defense.

PPL2OFE

Healthy Active Living Education

Grade 10, Female, Open

This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Students' 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.

PPL2OMA**Healthy Active Living Education
Grade 10, Male, Open**

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.

Recommended preparation: Healthy Active Living Education, Grade 10, Open**PPL3O****Healthy Active Living Education
Grade 11, Open**

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.

PAL3O**Fitness and Conditioning
Grade 11, Open**

This course focuses on healthy active living through participation in a wide variety of fitness and conditioning training methods, sports, and recreational activities that have the potential to engage students' interest throughout their lives. It will combine a large physical component with theoretical concepts. Students will have the opportunity to train within a vast and varied selection of fitness components: core; endurance; speed; agility; strength; power; flexibility and high intensity interval training. Students will monitor their progress through an assortment of robust fitness testing and body composition testing methods. This course is recommended for varsity and skilled athletes, however, the course is open to students of all abilities interested in advancing their personal fitness through physical challenge, goal setting, nutrition awareness, and creating and implementing individualized training programs.

PAL4O**Fitness and Conditioning
Grade 12, Open**

This course focuses on healthy active living through participation in a wide variety of fitness and conditioning training methods, sports, and recreational activities that have the potential to engage students' interest throughout their lives. It will combine a large physical component with theoretical concepts. Students will have the opportunity to train within a vast and varied selection of fitness components: core; endurance; speed; agility; strength; power; flexibility and high intensity interval training. Students will monitor their progress through an assortment of robust fitness testing and body composition testing methods. This course is

recommended for varsity and skilled athletes, however, the course is open to students of all abilities interested in advancing their personal fitness through physical challenge, goal setting, nutrition awareness, and creating and implementing individualized training programs.

Recommended preparation: Healthy Active Living Education, Grade 11, Open

PPL4O

Healthy Active Living Education Grade 12, Open

This course enables students to further develop the knowledge and skills they need to make healthy choices. It places special emphasis on how students can maintain the habits of healthy, active living through their lives as they make the transition to adulthood and independent living. Through participation in a wide range of physical activities in a variety of settings, students can 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.

Prerequisite: Any Grade 11 University/ College Preparation course in Science, or any Grade 11 or 12 course in Health and Physical Education

PSK4U

Introductory Kinesiology Grade 12, University Preparation

This course focuses on the study of human movement and of systems, factors, and principles involved in human development. Students will learn about the effects of

physical activity on health, the evolution of physical activity and sport, and the physiological, psychological, and social factors that influence an individual's participation in physical activity and sport. The course prepares students for university programs in physical education and health, kinesiology, health sciences, health studies, recreation and sports administration.

Prerequisite: Any health and physical education course

PLF4M

Recreation and Healthy Active Living Leadership Grade 12, University Preparation

This course enables students to explore the benefits of lifelong participation in active recreation and healthy leisure and to develop the leadership and coordinating skills needed to plan, organize, and safely implement recreational events and other activities related to healthy, active living. Students will also learn how to promote the benefits of healthy, active living to others through mentoring and assisting them in making informed decisions that enhance their well-being. The course will prepare students for university programs in physical education and health and kinesiology and for college and university programs in recreation and leisure management, fitness and health promotion, and fitness leadership.

Prerequisite: Minimum of 600 hours of elementary Core French instruction, or equivalent

Languages

French as a Second Language

FSF1D

Core French

Grade 9, Academic

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

FSF1P

Core French

Grade 9, Applied

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 life-long language learners.

Prerequisite: Core French, Grade 9, Academic or Applied

FSF2D

Core French

Grade 10, Academic

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 10, Academic

FSF3U

Core French

Grade 11, University Preparation

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.

Prerequisite: Core French, Grade 11, University Preparation

FSF4U

Core French

Grade 12, University Preparation

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: LWSBD

International Languages

LWSBD

Spanish

Grade 10, Academic

This course enables students to develop competence in listening, speaking, reading, and writing in the language of study.

Students will continue to participate in interactive activities in which they can apply and develop their language skills to communicate with native speakers of the language. They will explore aspects of culture in regions of the world where the language is spoken, including social customs, food, sports and leisure activities, popular festivals, and music. Although students will expand their vocabulary and knowledge of linguistic elements, the language they will use at this level will still be simple.

LWSCU

Spanish

Grade 11, University Preparation

This course offers students opportunities to further develop competence and confidence in listening, speaking, reading, and writing in the language of study. Students will participate in interactive activities (e.g., discussions about literature, travel, shopping) in which they will further develop their

knowledge of linguistic elements. They will continue to explore aspects of culture in regions of the world where the language is spoken, including fashion, historical figures, art, and architecture. Students will enhance their critical and creative thinking skills through reading diverse materials, including original literature, and will explore a variety of personal and professional contexts in which knowledge of the international language is required.

Mathematics

MPM1D

Principles of Mathematics

Grade 9, Academic

This course enables students to develop an understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will then generalize as equations of lines, and will determine the connections between different representations of a linear relation. They will also explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

MPM1DE

Principles of Mathematics

Grade 9, Academic, Enriched

This course enables students to develop an understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will

then generalize as equations of lines, and will determine the connections between different representations of a linear relation. They will also explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course also extends students' mathematical knowledge through enrichment that may include mathematics contest work, open-ended problems, techniques for solving non-routine problems or other topics of interest to students.

MAT1L

Mathematics

Grade 9, Locally Developed

This course emphasizes further development of mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, in the Grade 10 LDCC course. The course is organized in three strands related to money sense, measurement, and proportional reasoning. In all strands, the focus is on developing and consolidating key foundational mathematical concepts and skills by solving authentic, everyday problems. Students have opportunities to further develop their mathematical literacy and problem-solving skills and to continue developing their skills in reading, writing, and oral language through relevant and practical math activities.

Note: Students who wish to take Principles of Mathematics, Grade 10, Academic (MPM2D) after completing this course will need to take a transfer course.

MFM1P

Foundations of Mathematics

Grade 9, Applied

This course enables students to develop an 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 relations, and will determine the connections between the representations. They will also explore certain relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Prerequisite: Principles of Mathematics, Grade 9, Academic

MPM2D

Principles of Mathematics

Grade 10, Academic

This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigations, the effective use of technology, and abstract reasoning. Students will explore quadratic relations and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute triangles. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Prerequisite: Principles of Mathematics, Grade 9, Academic

MPM2DE**Principles of Mathematics****Grade 10, Academic, Enriched**

This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic relations and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute triangles. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course also extends students' mathematical knowledge through enrichment that may include mathematics contest work, open-ended problems, techniques for solving non-routine problems or other topics of interest to students.

Prerequisite: a Grade 9 Mathematics credit

MAT2L**Mathematics****Grade 10, Locally Developed**

This course emphasizes the extension of mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, and in the Grade 11 Mathematics Workplace Preparation course. The course is organized in three strands related to money sense, measurement, and proportional reasoning. In all strands, the focus is on strengthening and extending key foundational mathematical concepts and skills by solving authentic, everyday problems. Students have opportunities to extend their mathematical literacy and problem-solving skills and to continue developing their skills in reading,

writing, and oral language through relevant and practical math activities.

Prerequisite: Principles of Mathematics, Grade 9, Academic or Foundations of Mathematics, Grade 9, Applied

MFM2P**Foundations of Mathematics****Grade 10, Applied**

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 hands-on 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 relations. Students will investigate similar triangles, the trigonometry of right triangles, and the measurement of three-dimensional figures. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Prerequisite: Foundations of Mathematics, Grade 10, Applied

MBF3C**Foundations for College Mathematics****Grade 11, College Preparation**

This course enables students to broaden their understanding of mathematics as a problem-solving tool in the real world. Students will extend their understanding of quadratic relations, as well as of measurement and geometry; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; and develop their ability to reason by collecting, analyzing, and evaluating data involving one and two variables. Students will consolidate their

mathematical skills as they solve problems and communicate their thinking.

Prerequisite: Principles of Mathematics, Grade 10, Academic, or Foundations of Mathematics, Grade 10, Applied

MCF3M

Functions and Applications

Grade 11, University/College Preparation

This course introduces basic features of the function by extending students' experiences with the quadratic relations. It focuses on quadratic, trigonometric and exponential functions and their use in modeling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to financial and trigonometric applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Prerequisite: Principles of Mathematics, Grade 10, Academic, or Foundations of Mathematics, Grade 10, Applied

MCR3U

Functions

Grade 11, University Preparation

This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; and develop facility in simplifying polynomial and rational expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Prerequisite: Principles of Mathematics, Grade 10, Academic

MCR3UE

Functions

Grade 11, University Preparation, Enriched

This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; investigate inverse functions; and develop facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course also extends students' mathematical knowledge through enrichment that may include mathematics contest work, open-ended problems, techniques for solving non-routine problems, or other topics of interest to students.

Prerequisite: Principles of Mathematics, Grade 9, Academic, or Foundations of Mathematics, Grade 9, Applied, or a ministry-approved locally developed Grade 10 mathematics course

MEL3E

Mathematics for Work and Everyday Life Grade 11, Workplace Preparation

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. 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. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Prerequisite: Foundations for College Mathematics, Grade 11, College Preparation, or Functions and Applications, Grade 11, University/College Preparation

**MAP4C
Foundations for College Mathematics
Grade 12, College Preparation**

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyze 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.

Prerequisite: Functions and Applications, Grade 11, University/College Preparation, or Functions, Grade 11, University Preparation

**MCT4C
Mathematics for College Technology
Grade 12, College Preparation**

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.

Note: The new Advanced Functions course (MHF4U) must be taken prior to or concurrently with Calculus and Vectors (MCV4U).

**MCV4U
Calculus and Vectors
Grade 12, University Preparation**

This course builds on students' previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors, and representations of lines and planes in three-dimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, rational, exponential, and sinusoidal functions; and apply these concepts and skills to the 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.

Prerequisite: Functions, Grade 11, University Preparation, or Functions and Applications, Grade 11, University/College Preparation

**MDM4U
Mathematics of Data Management
Grade 12, University Preparation**

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: Mathematics for Work and Everyday Life, Grade 11, Workplace Preparation

MEL4E

Mathematics for Work and Everyday Life Grade 12, Workplace Preparation

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will investigate questions involving the use of statistics; apply the concept of probability to solve problems involving 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.

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

MHF4U

Advanced Functions Grade 12, University Preparation

This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric functions; 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: Functions, Grade 11, University Preparation, or Mathematics for College Technology, Grade 12, College Preparation

MHF4UE

Advanced Functions Grade 12, University Preparation, Enriched

This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric functions; develop techniques for combining functions; broaden their understanding of rates of change; and develop facility in applying these concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended both for students taking the Calculus and Vectors course as a prerequisite for a university program and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs. This course also extends students' mathematical knowledge through enrichment that may include mathematics contest work, open-ended problems, techniques for solving non-routine problems, or other topics of interest to students.

Prerequisite: Any Grade 11 First Nations, Métis and Inuit Studies or any Grade 11 University, University/College, or College Preparation course in Canadian and World Studies or any Grade 11 University, University/ College, or College Preparation course Social Science and Humanities.

Native Studies

NDA3M

Current Aboriginal Issues in Canada Grade 11, University/College Preparation

This course focuses on existing and emerging issues of national and regional importance of concern to Aboriginal peoples in Canada. Students will analyze diverse perspectives from a variety of sources such as media, academic works and public opinion polls on events and developments related to land, community, governance, identity and culture. Using political thinking concepts and the political inquiry process students will explore their own and others' ideas, investigate an issue to determine what needs to change, why and appropriate problem-solving strategies.

Prerequisite: Grade 10 First Nations, Métis, and Inuit Peoples in Canada, Open, or Grade 10 Canadian History Since World War I, Academic or Applied

NDW4M

Issues of Indigenous Peoples in a Global Context

Grade 12, University/College Preparation

This course examines historical and contemporary issues of concern to Indigenous peoples from a global perspective. Students will explore the richness, depth, and diversity of Indigenous cultures, traditions and knowledge. They will consider how diverse Indigenous communities persevere despite recent global environmental and economic trends. Topics such as identity, social justice, human rights and abuses, spirituality, resistance and protest for change will be investigated.

Science

SNC1D

Science Grade 9, Academic

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Throughout the course, students will develop their skills in the processes of scientific investigation. Students will acquire an understanding of scientific theories and conduct investigations related to sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of electricity.

SNC1DE

Science Grade 9, Academic, Enriched

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. The regular topics in SNC1D are supplemented and enriched by a number of related activities to delve into cause and effect scientific relationships as well as in-depth investigations that challenge students to investigate their own curiosity.

SNC1L**Science****Grade 9, Locally Developed**

This course emphasizes reinforcing and strengthening science-related knowledge and skills, including scientific inquiry, critical thinking, and the relationship between science, society, and the environment, 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 daily life, properties of common materials, life-sustaining processes in simple and complex organisms, and electrical circuits. Students have the opportunity to extend mathematical and scientific process skills and to continue developing their skills in reading, writing, and oral language through relevant and practical science activities.

SNC1P**Science****Grade 9, Applied**

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: SNC1D or SNC1P. It is strongly recommended that SNC1P students have a recommendation from their teacher.

SNC2D**Science****Grade 10, Academic**

This course enables students to enhance their understanding of concepts in biology, chemistry, earth and space science, and physics, and of the interrelationships between science, technology, society, and the environment. Students are also given opportunities to further develop their scientific investigation skills. Students will plan and conduct investigations and develop their understanding of scientific theories related to the connections between cells and systems in animals and plants; chemical reactions, with a particular focus on acid–base reactions; forces that affect climate and climate change; and the interaction of light and matter.

Prerequisite: Science, Grade 9, Enriched or Academic

SNC2DE**Science****Grade 10, Academic, Enriched**

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. The regular topics in SNC2D are supplemented and enriched by a number of related activities to delve into cause and effect

scientific relationships as well as in-depth investigations that challenge students to investigate their own curiosity.

SNC2L

Science

Grade 10, Locally Developed

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. Students have the opportunity to extend mathematical and scientific process skills and to continue developing their skills in reading, writing, and oral language through relevant and practical science activities.

Prerequisite: Science, Grade 9, Academic or Applied Note: Grade 11 and 12 College Preparation courses in Science can be taken in either Grade 11 or 12

SNC2P

Science

Grade 10, Applied

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 10, Academic or Applied

SBI3C

Biology

Grade 11, College Preparation

This course focuses on the processes that occur in biological systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, genetics, the anatomy of mammals, and the structure of plants and their role in the natural environment. 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.

Prerequisite: Science, Grade 10, Academic

SBI3U

Biology

Grade 11, University Preparation

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

SCH3U

Chemistry

Grade 11, University Preparation

This course enables students to deepen their understanding of chemistry through the study of the properties of chemicals and chemical bonds; chemical reactions and quantitative relationships in those reactions; solutions and solubility; and atmospheric chemistry and the 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

SPH3U

Physics

Grade 11, University Preparation

This course develops students' understanding of the basic concepts of physics. Students will explore kinematics, with an emphasis on linear motion; different kinds of forces; energy transformations; the properties of mechanical waves and sound; and electricity and magnetism. They will enhance their scientific investigation skills as they test laws of physics. In addition, they will analyze the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment.

Prerequisite: Science, Grade 9, Academic or Applied, or Grade 9 or 10 locally developed compulsory credit (LDCC) course in science

SVN3E

Environmental Science

Grade 11, Workplace Preparation

This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in work and life after secondary school. Students will explore a range of topics, including the impact of human activities on the environment; human health and the environment; energy conservation; resource science and management; and safety and environmental responsibility in the workplace. Emphasis is placed on relevant, practical applications and current topics in environmental science, with attention to the refinement of students' literacy and mathematical literacy skills as well as

the development of their scientific and environmental literacy.

Prerequisite: Biology, Grade 11, University Preparation

SBI4U

Biology

Grade 12, University Preparation

This course provides students with the opportunity for in-depth study of the concepts and processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biochemistry, metabolic processes, molecular genetics, homeostasis, and population dynamics. Emphasis will be placed on the achievement of detailed knowledge and the refinement of skills needed for further study in various branches of the life sciences and related fields.

Prerequisite: Science, Grade 10, Academic or Applied

SCH4C

Chemistry

Grade 12, College 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: Chemistry, Grade 11, University Preparation

SCH4U**Chemistry****Grade 12, University Preparation**

This course enables students to deepen their understanding of chemistry through the study of organic chemistry, the structure and properties of matter, energy changes and rates of reaction, equilibrium in chemical systems, and electrochemistry. Students will further develop their problem solving and investigation skills as they investigate chemical processes, and will refine their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in everyday life and on evaluating the impact of chemical technology on the environment.

Prerequisite: Science, Grade 10, Academic or Applied

SPH4C**Physics****Grade 12, College Preparation**

This course develops students' understanding of the basic concepts of physics. Students will explore these concepts with respect to motion; mechanical, electrical, electromagnetic, energy transformation, hydraulic, and pneumatic systems; and the operation of commonly used tools and machines. They will develop their scientific investigation skills as they test laws of physics and solve both assigned problems and those emerging from their investigations. Students will also consider the impact of technological applications of physics on society and the environment.

Prerequisite: Physics, Grade 11, University Preparation

SPH4U**Physics****Grade 12, University Preparation**

This course enables students to deepen their understanding of physics concepts and theories. Students will continue their exploration of energy transformations and the forces that affect motion, and will investigate electrical, gravitational, and magnetic fields and electromagnetic radiation. Students will also explore the wave nature of light, quantum mechanics, and special relativity. They will further develop their scientific investigation skills, learning, for example, how to analyze, qualitatively and quantitatively, data relating to a variety of physics concepts and principles. Students will also consider the impact of technological applications of physics on society and the environment.

Prerequisite: Grade 10 Science, Academic, or any Grade 11 university, university/college, or college preparation course in science

SNC4M**Science****Grade 12, University / College Preparation**

This course enables students, including those pursuing postsecondary programs outside the sciences, to increase their understanding of science and contemporary social and environmental issues in health-related fields. Students will explore a variety of medical technologies, pathogens and disease, nutritional science, public health issues, and biotechnology. The course focuses on the theoretical aspects of the topics under study and helps refine students' scientific investigation skills.

Social Science & Humanities

HFN10

Food and Nutrition

Grade 9, Open

This course focuses on guidelines for making nutritious food choices. Students will investigate factors that influence food choices, including beliefs, attitudes, current trends, traditional eating patterns, food marketing strategies, and individual needs. Students will also explore the environmental impact of a variety of food choices at the local and global level. The course provides students with opportunities to develop food preparation skills and introduces them to the use of social science research methods in the area of food and nutrition.

HIF10

Exploring Family Studies

Grade 9, Open

This course explores, within the context of families, some of the fundamental challenges people face: how to meet basic needs, how to relate to others, how to manage resources, and how to become responsible members of society. Students will explore adolescent development and will have opportunities to develop interpersonal, decision-making, and practical skills related to daily life. They will learn about the diverse ways in which families function in Canada and will use research skills as they explore topics related to individual and family needs and resources.

HLS30

Housing and Home Design

Grade 11, Open

This course introduces students to a range of issues related to housing and home design. Students will learn about the needs

that housing fulfills; housing options; home maintenance and safety; and environmental, economic, legal, and social considerations related to housing. They will use the elements and principles of design to analyse design and decorating decisions. Students will develop research skills as they investigate issues related to housing and home design. They will also learn skills used in researching and investigating living accommodations and housing.

HNC3C

Understanding Fashion

Grade 11, College Preparation

This course introduces students to the world of fashion. Students will gain an understanding of theories related to fashion trends and of how culture, media, fashion cycles, retailing, and social and environmental factors influence fashion trends and consumer behaviour. Students will use various tools, technologies, and techniques safely and correctly to create fashion items. They will apply knowledge of fibres, fabrics, and the elements and principles of design when creating and assessing fashion-related products. Students will develop research skills as they investigate topics related to fashion.

HPC3O

Raising Healthy Children

Grade 11, Open

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.

Prerequisite: The Grade 10 academic course in English or the Grade 10 academic history course (Canadian and World Studies).

HSP3U

Introduction to Anthropology, Psychology, and Sociology

Grade 11, University Preparation

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.

HSP3C

Introduction to Anthropology, Psychology, and Sociology

Grade 11, College Preparation

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. Students 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: Any university or university/college preparation course in Social Sciences and Humanities, English, or Canadian and World Studies.

HSB4U

Challenge and Change in Society **Grade 12, University Preparation**

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.

HIP4O

Personal Life Management **Grade 12, Open**

This course focuses on preparing students for living independently and working successfully with others. Students will learn to manage their personal resources to meet their basic needs for food, clothing, and housing. They will also learn about their personal, legal, and financial responsibilities and develop and apply interpersonal skills in order to make wise and responsible personal and occupational choices. Students will apply research and inquiry skills while investigating topics related to personal life management. The course emphasizes the achievement of expectations through practical experiences.

Prerequisite: any university, college or university/college preparation course in Social Sciences and Humanities, English or Canadian and World Studies, Food and Healthy Living, Grade 12 Workplace Preparation

HHS4C**Families in Canada****Grade 12, College Preparation**

This course enables students to develop an understanding of social science theories as they apply to individual development, the development of intimate relationships, and family and parent-child relationships. Students will explore a range of issues relating to the development of individuals and families in contemporary Canadian society as well as in other cultures and historical periods. They will develop the investigative skills required to conduct research on individuals, intimate relationships, and parent-child roles and relationships in Canada.

Prerequisite: any university or university/college preparation course in Social Sciences and Humanities, English or Canadian and World Studies

HHS4U**Families in Canada****Grade 12, University Preparation**

This course enables students to draw on sociological, psychological, and anthropological theories and research to analyse the development of individuals, intimate relationships, and family and parent-child relationships. Students will focus on issues and challenges facing individuals and families in Canada's diverse society. They will develop analytical tools that enable them to assess various factors affecting families and to consider policies and practices intended to support families in Canada. They will develop the investigative skills required to conduct and communicate the results of 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

HZT4U**Philosophy: Questions and Theories, Grade 12, University Preparation**

This course enables students to acquire an understanding of the nature of philosophy and philosophical reasoning skills and to develop and apply their knowledge and skills while exploring specialized branches of philosophy (the course will cover at least three of the following branches: metaphysics, ethics, epistemology, philosophy of science, social and political philosophy, aesthetics). Students will develop critical thinking and philosophical reasoning skills as they formulate and evaluate arguments related to a variety of philosophical questions and theories. They will also develop research and inquiry skills related to the study and practice of philosophy

Technology

TIJ1O**Exploring Technologies
Grade 9, Open, (Co-Ed)**

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.

TIJ1OF**Exploring Technologies****Grade 9, Open, Female**

This introductory course in technology will expose students to a variety of our technical studies through a series of rotations. 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 post secondary education and training pathways leading to careers in technology-related fields.

Recommended preparation: TGJ2O

Communications Technology**TGJ3M****Communications Technology****Grade 11, University/College Preparation**

This course examines communications technology from a media perspective. Students will develop knowledge and skills as they design and produce media projects in the areas of live, recorded, and graphic communications. These areas may include TV, video, and movie production; radio and audio production; print and graphic communications; photography; digital imaging; broadcast journalism; and interactive new media. Students will also develop an awareness of related environmental and societal issues and explore college and university programs and career opportunities in the various

communications technology fields.

Prerequisite: TGJ3M or TGJ3MT

TGJ2O**Communications Technology****Grade 10, Open**

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.

TGJ4M**Communications Technology****Grade 12, University/College Preparation**

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

Prerequisite: TGJ3M or TGJ3MT

Emphasis Courses Related to TGJ3M

TGI3M

Communications Technology, Interactive New Media and Animation

Grade 11, University/College Preparation

This course enables students to further develop knowledge and skills in animation, and advanced graphic creation and manipulation.

Prerequisite: TGJ3M or TGJ3MT

TGP3M

Communications Technology, Photography and Digital Imaging

Grade 11, University/College Preparation

This course enables students to further develop knowledge and skills in digital imaging and photography.

Prerequisite: TGJ3M or TGJ3MT. **This course will be partially team-taught with a college instructor. Upon successful completion of the college portion of the secondary course, the student will be eligible to receive a college credit (pending approval).**

TGP3MZ, (Dual Credit (pending))

Communications Technology, Photography and Digital Imaging

Grade 11, University/College Preparation

This course enables students to further develop knowledge and skills in digital imaging and photography.

Prerequisite: TGJ3M or TGJ3MT

TGR3M

Communications Technology, Radio, Audio and Sound Production

Grade 11, University/College Preparation

This course enables students to further develop knowledge and skills in radio, audio and recorded sound production.

Prerequisite: TGJ3M or TGJ3MT

TGV3M

Communications Technology, Movie and Video Production

Grade 11, University/College Preparation

This course enables students to further develop knowledge and skills in video and film production.

Recommended preparation: TGJ2O1

TGJ3O

Communications Technology, Broadcast and Print Production

Grade 11, Open

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

Prerequisite: TGJ4M or TGJ4MT or TGP3M

Emphasis Courses Related to TGJ3M

TGI4M

Communications Technology, Interactive New Media and Animation

Grade 12, University/College Preparation

This course enables students to further develop knowledge and skills in animation, and advanced graphic creation and manipulation.

Prerequisite: TGJ4M or TGJ4MT or TGI3M

TGP4M**Communications Technology, Photography and Digital Imaging****Grade 12, University/College Preparation**

This course enables students to further develop knowledge and skills in digital imaging and photography.

Prerequisite: TGJ4M or TGJ4MT or TGR3M

TGR4M**Communications Technology, Radio, Audio and Sound Production****Grade 12, University/College Preparation**

This course enables students to further develop knowledge and skills in radio, audio and recorded sound production.

Prerequisite: TGJ4M or TGJ4MT or TGV3M

TGV4M**Communications Technology, Movie and Video Production****Grade 12, University/College Preparation**

This course enables students to further develop knowledge and skills in video and film production.

Prerequisite: None

Computer Technology**TEJ2O****Computer Technology****Grade 10, Open**

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

TEC3E**Computer Technology****Grade 11, Workplace Preparation**

This course enables students to further develop knowledge and skills related to computer hardware. The focus of this course is a practical hands-on approach to proper maintenance and repair of desktop and laptop computers. Students will gain a better understanding of operating systems and proper software installation practices.

Recommended Preparation: TEJ2O

TEJ3M**Computer Engineering Technology****Grade 11, University/College Preparation**

This course examines computer systems and control of external devices. Students will assemble computers and small networks by installing and configuring appropriate hardware and software. Students will develop knowledge and skills in electronics, robotics, programming, and networks, and will build systems that use computer programs and interfaces to control and/or respond to external devices. Students will develop an awareness of related environmental and societal issues, and will learn about college and university programs leading to careers in computer technology.

Prerequisite: TEJ3M

TEJ4M**Computer Engineering Technology****Grade 12, University/College Preparation**

This course extends students' understanding of computer systems and computer interfacing with external devices. Students will assemble computer systems by installing and configuring appropriate hardware and software, and will learn more about fundamental concepts of electronics, robotics, programming, and networks. Students will examine related environmental

and societal issues, and will explore postsecondary pathways leading to careers in computer technology.

Recommended Prerequisites: TCJ2O, TIJ1O or TTI1O

Construction Technology

TCJ2O

Construction Technology

Grade 10, Open

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.

Recommended preparation: TIJ1O or TTI1O

TCJ3C

Construction Engineering Technology

Grade 11, University/College Preparation

This course focuses on the development of knowledge and skills related to residential construction. Students will gain hands-on experience using a variety of construction materials, processes, tools, and equipment; learn about building design and planning construction projects; create and interpret working drawings and sections; and learn how the Ontario Building Code and other regulations and standards apply to

construction projects. Students will also develop an awareness of environmental and societal issues related to construction technology, and will explore career opportunities in the field.

TCJ3E2, (2 Credits)

Construction Technology (Building Construction)

Grade 11, Workplace Preparation

This course enables students to develop technical knowledge and skills related to carpentry, masonry, electrical systems, heating and cooling, and plumbing for residential construction. Students will gain hands-on experience using a variety of materials, processes, tools, and equipment to design, lay out, and build projects. They will create and read technical drawings, learn construction terminology, interpret building codes and regulations, and apply mathematical skills as they develop construction projects. Students will also develop an awareness of environmental and societal issues related to construction technology, and will explore post secondary career opportunities in the field.

Prerequisite: TCJ3C

TCJ4C

Construction Engineering Technology

Grade 12, University/College Preparation

This course enables students to further develop knowledge and skills related to residential construction and to explore light commercial construction. Students will gain hands-on experience using a variety of materials, processes, tools, and equipment, and will learn more about building design and project planning. They will continue to create and interpret construction drawings and will extend their knowledge of construction terminology and of relevant building codes and regulations, as well as

health and safety standards and practices. Students will also focus on environmental and societal issues related to construction engineering technology, and will explore career opportunities in the field.

Prerequisite: Construction Technology, Grade 11, Workplace Preparation

TCJ4E2, (2 Credits)

Construction Technology, (Building Construction)

Grade 12, Workplace Preparation

This course enables students to further develop technical knowledge and skills related to residential construction and to explore light commercial construction. Students will continue to gain hands-on experience using a variety of materials, processes, tools, and equipment; create and interpret construction drawings; and learn more about building design and project planning. They will expand their knowledge of terminology, codes and regulations, and health and safety standards related to residential and light commercial construction. Students will also expand their awareness of environmental and societal issues related to construction technology, and will explore entrepreneurship and career opportunities in the industry that may be pursued directly after graduation.

Cosmetology Technology

TXJ10

**Exploring Hairstyling and Aesthetics
Grade 9, Open**

This exploratory course introduces students to concepts and skills related to hairstyling and aesthetics, including hairstyles, manicures, nail art, and skin care. Students will investigate societal issues and environmental issues as well as the many different post secondary education and

career paths that can be taken in the beauty and wellness industry.

TXJ20

**Hairstyling and Aesthetics
Grade 10, Open**

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 post secondary pathways leading to careers in the field of hairstyling and aesthetics.

TXJ3E

**Hairstyling and Aesthetics
Grade 11, Workplace Preparation**

This course enables students to develop knowledge and skills in cosmetology and offers a variety of applications that will equip students to provide services for a diverse clientele. Students will identify trends in the hairstyling and aesthetics industry, learn about related health and safety laws, and expand their communication and interpersonal skills through interactions with peers and clients. Students will also consider environmental and societal issues related to the industry, and will acquire a more detailed knowledge of apprenticeships and direct-entry work positions.

Prerequisite: Hairstyling and Aesthetics, Grade 11, Workplace Preparation

TXJ4E2, (2 Credits)

**Hairstyling and Aesthetics (Hairstyling)
Grade 12, Workplace Preparation**

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 will also expand their understanding of environmental and societal issues and their knowledge of post secondary destinations in the hairstyling and aesthetics industry. This course is designed for students who are interested in all aspects of the cosmetology industry with an emphasis on aesthetics.

Prerequisite: Hairstyling and Aesthetics, Grade 11, Workplace Preparation

TXA4E2, (2 Credits)

Hairstyling and Aesthetics (Aesthetics) Grade 12, Workplace Preparation

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 will also expand their understanding of environmental and societal issues and their knowledge of post secondary destinations in the hairstyling and aesthetics industry. This course is designed for students who are interested in all aspects of the cosmetology industry with an emphasis on aesthetics.

Design Technology

TDJ2O

Technological Design (Design and Drafting) Grade 10, Open

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 learn about secondary and post secondary education and training leading to careers in the field.

TDJ3M

Technological Design, (Design & Drafting) Grade 11, University/College Preparation

This course examines how technological design is influenced by human, environmental, financial, and material requirements and resources. Students will research, design, build, and assess solutions that meet specific human needs, using working drawings and other communication methods to present their design ideas. They will develop an awareness of environmental, societal, and cultural issues related to technological design, and will explore career opportunities in the field, as well as the college and/or university program requirements for them.

Prerequisite: Technological Design, Grade 11, University/College Preparation

TDJ4M

Technological Design (Design & Drafting) Grade 12, University/College Preparation

This course introduces students to the fundamentals of design advocacy and marketing, while building on their design skills and their knowledge of professional design practices. Students will apply a systematic design process to research, design, build, and assess solutions that meet specific human needs, using illustrations, presentation drawings, and other communication methods to present their designs. Students will enhance their problem-solving and communication

skills, and will explore career opportunities and the post secondary education and training requirements for them.

Grade 11 Green Industries, University/College Preparation

Green Industries

THJ3M

Green Industries

Grade 11, University/College Preparation

This course enables students to develop knowledge and skills related to agriculture, forestry, horticulture, and landscaping.

Students will study the identification, growth, and management of plants and animals and develop process, design, and management skills required in the green industries. Students will also examine social and economic issues related to the green industries, learn about safe and healthy working practices, study industry standards and codes, and will explore postsecondary education programs and career opportunities.

THJ4M

Green Industries

Grade 12, University/College Preparation

This course focuses on more complex concepts and skills related to the green industries. Students will focus on developing process skills, design and management techniques, and ways of enhancing environmental sustainability. They will also examine social and economic issues related to the green industries, learn about safe and healthy working practices, study industry standards and codes, and explore career opportunities. The knowledge and skills acquired in this course will prepare students for more specialized studies at the college and university level.

Hospitality & Tourism

TFJ2O

Hospitality and Tourism Technology, (Culinary Arts)

Grade 10, Open

This course provides students with opportunities to explore different areas of hospitality and tourism, as reflected in the various sectors of the tourism industry, with an emphasis on food service. Students will study culinary techniques of food handling and preparation, health and safety standards, the use of tools and equipment, the origins of foods, and event planning, and will learn about tourism attractions across Ontario. Students will develop an awareness of related environmental and societal issues and will explore secondary and post secondary pathways leading to careers in the tourism industry.

TFJ3C

Hospitality and Tourism, (Baking)

Grade 11, College Preparation

Pastry and baking techniques should be emphasized. This course enables students to develop or expand knowledge and skills related to hospitality and tourism, as reflected in the various sectors of the tourism industry. Students will learn about preparing and presenting food, evaluating facilities, controlling inventory, and marketing and managing events and activities, and will investigate customer service principles and the cultural and economic forces that drive tourism trends. Students will develop an awareness of health and safety standards, environmental and societal issues, and career opportunities in the tourism industry.

Prerequisite: Hospitality and Tourism, Grade 11, College Preparation

TFJ4C**Hospitality and Tourism, (Baking)
Grade 12, College Preparation**

Baking and pastry techniques will be emphasized. This course enables students to further develop knowledge and skills related to the various sectors of the tourism industry. Students will demonstrate advanced food preparation and presentation skills; increase health and wellness knowledge; develop tourism administration and management skills; design and implement a variety of events or activities; and investigate principles and procedures that contribute to high-quality customer service. Students will expand their awareness of health and safety issues, environmental and societal issues, and career opportunities in the tourism industry.

TFR3C2, (2 Credits)**Hospitality and Tourism, (Culinary Arts & Management)****Grade 11, College Preparation**

This course enables students to develop or expand knowledge and skills related to hospitality and tourism, as reflected in the various sectors of the tourism industry. Students will learn about preparing and presenting food, evaluating facilities, controlling inventory, and marketing and managing events and activities, and will investigate customer service principles and the cultural and economic forces that drive tourism trends. Students will develop an awareness of health and safety standards, environmental and societal issues, and career opportunities in the tourism industry.

Prerequisite: Hospitality and Tourism, Grade 11, College Preparation

TFR4C2, (2 Credits)**Hospitality and Tourism, (Culinary Arts & Management)****Grade 12, College Preparation**

This course enables students to further develop knowledge and skills related to the various sectors of the tourism industry. Students will demonstrate advanced food preparation and presentation skills; increase health and wellness knowledge; develop tourism administration and management skills; design and implement a variety of events or activities; and investigate principles and procedures that contribute to high-quality customer service. Students will expand their awareness of health and safety issues, environmental and societal issues, and career opportunities in the tourism industry.

Recommended preparation: TMJ2O, TCJ2O, TIJ1O or TTI1O

Manufacturing Technology**TMJ2O****Manufacturing Technology****Grade 10, Open**

This course introduces students to the manufacturing industry by giving them an opportunity to design and fabricate products using a variety of processes, tools, and equipment. Students will learn about technical drawing, properties and preparation of materials, and manufacturing techniques. Student projects may include a robotic challenge, a design challenge, or a fabrication project involving processes such as machining, welding, vacuum forming, or injection moulding. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about secondary and postsecondary pathways leading to careers in the industry.

Recommended preparation: TIJ1O or TTI1O

TMJ3C**Manufacturing Technology
Grade 11, College Preparation**

This course enables students to develop knowledge and skills through hands-on, project-based learning. Students will acquire design, fabrication, and problem-solving skills while using tools and equipment such as lathes, mills, welders, computer aided machines, robots, and control systems. Students may have opportunities to obtain industry-standard certification and training. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about pathways leading to careers in the industry.

TMJ3C2, (2 Credits)**Manufacturing Technology, (Machining/
Welding)****Grade 11, College Preparation**

This course enables students to develop knowledge and skills through hands-on, project-based learning. Students will acquire design, fabrication, and problem-solving skills while using tools and equipment such as lathes, mills, welders, computer-aided machines, robots, and control systems. Students may have opportunities to obtain industry-standard certification and training. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about pathways leading to careers in the industry.

TMJ3M**Manufacturing Technology (Machining)
Grade 11, University/College Preparation**

This course enables students to develop knowledge and skills related to design, process planning, control systems, and quality assurance. Students will use a broad range of tools and equipment and will combine modern manufacturing

techniques and processes with computer-aided manufacturing as they develop critical decision-making, problem-solving, and project-management skills. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about pathways leading to careers in the industry.

TMW3E**Manufacturing Technology, (Welding)
Grade 11, Workplace Preparation**

This course focuses on welding and fabricating technology. This hands-on, project-based course is designed for students planning to enter an occupation or apprenticeship in manufacturing directly after graduation. Students will work on a variety of manufacturing projects, developing knowledge and skills in design, fabrication, and problem solving and using tools and equipment such as engine lathes, milling machines, and welding machines. In addition, students may have the opportunity to acquire industry standard certification and training. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about secondary school pathways that lead to careers in the industry.

**Prerequisite: Manufacturing Technology,
Grade 11, College Preparation****TMJ4C****Manufacturing Technology
Grade 12, College Preparation**

This course enables students to further develop knowledge and skills related to machining, welding, print reading, computer numerical control (CNC), robotics, and design. Students will develop proficiency in using mechanical, pneumatic, electronic, and computer control systems in a project-based learning environment and may have

opportunities to obtain industry-standard training and certification. Students will expand their awareness of environmental and societal issues and career opportunities in the manufacturing industry.

Prerequisite: Manufacturing Technology, Grade 11, College Preparation

TMJ4C2, (2 Credits)

Manufacturing Technology, (Machining & Welding)

Grade 12, College Preparation

This course enables students to further develop knowledge and skills related to machining, welding, print reading, computer numerical control (CNC), robotics, and design. Students will develop proficiency in using mechanical, pneumatic, electronic, and computer control systems in a project-based learning environment and may have opportunities to obtain industry-standard training and certification. Students will expand their awareness of environmental and societal issues and career opportunities in the manufacturing industry.

Prerequisite: Manufacturing Engineering Technology, Grade 11, University/College Preparation

TMJ4M

Manufacturing Technology (Machining)
Grade 12, University/College Preparation

This course enables students to further develop knowledge and skills related to design, process planning, control systems, project management, quality assurance, and business operations. Students will use a broad range of tools and equipment, enhance their skills in computer aided design, and collaborate in managing a project. Students will critically analyse and solve complex problems involved in manufacturing products. Students will expand their awareness of environmental

and societal issues and of career opportunities in the manufacturing industry.

Prerequisite: Manufacturing Technology, Grade 11, Workplace Preparation

TMW4E

Manufacturing Technology, (Welding)
Grade 12, Workplace Preparation

This project-driven, hands-on course builds on students' experiences in manufacturing technology. Students will further develop knowledge and skills related to the use of engine lathes, milling machines, welding machines, and other related tools and equipment as they design and fabricate solutions to a variety of technological challenges in manufacturing. Students may have opportunities to acquire industry-standard training and certification. Students will expand their awareness of environmental and societal issues and of career opportunities in the manufacturing industry. Focus will be on welding and fabrication.

Transportation Technology

TTJ2O

Transportation Technology, (Auto)
Grade 10, Open

This course introduces students to the service and maintenance of vehicles, aircraft, and/or watercraft. Students will develop knowledge and skills related to the construction and operation of vehicle/craft systems and learn maintenance and repair techniques. Student projects may include the construction of a self-propelled vehicle or craft, engine service, tire/wheel service, electrical/ battery service, and proper body care. Students will develop an awareness of related environmental and societal issues and will explore secondary and post secondary pathways leading to careers in the transportation industry.

TTA3C2, (2 Credits)

**Transportation Technology, (Auto Service)
Grade 11, College Preparation**

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.

This course provides an emphasis on Auto Service

TTH3C2, (2 Credits)

**Transportation Technology, (Heavy Duty & Agricultural Equipment)
Grade 11, College Preparation**

Farm equipment repair/service will be emphasized in this 2 credit course. 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.

Prerequisite: Transportation Technology, College Preparation, Grade 11. This course provides an emphasis on Auto Service

TTH4C2, (2 Credits)

**Transportation Technology (Heavy Duty & Agricultural Equipment)
Grade 12, College Preparation**

Farm equipment repair/service will be the emphasis for this 2 credit course. 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, College Preparation, Grade 11. This course provides an emphasis on Auto Service

TTA4C2, (2 Credits)

**Transportation Technology, (Auto Service)
Grade 12, College Preparation**

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.

COURSE CALENDAR 2019-2020

Stratford Secondary Schools

