COURSE CALENDAR 2020-2021

# St. Marys District Collegiate & Vocational Institute

# Table of Contents

# SMDCVI Course Calendar 2020-2021

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 in grades 9-11, need to be registered full time in each semester.

It is time for students to select their courses for the next school year. You are required to make decisions about courses you would like to take and these decisions should be based on your own strengths and your plans for the future. In order to earn an Ontario Secondary School Diploma, each student must earn thirty credits. Eighteen of these credits are mandatory, but the other twelve are at your discretion. Your eighteen mandatory credits should be based on your goals for your future destination after you leave DCVI. Will you want to go to the workplace, complete an apprenticeship, attend college or enroll in a university program? Each of these pathways requires different courses. Statistics tell us that about one-quarter of our graduates will go on to the world of work from high school, another one-quarter will go to college, another one-quarter will choose university and the final twenty-five per cent will choose apprenticeship training. Ideally, you'll choose your courses in grade 9 that lead to the outcome you will want to have when you graduate from grade 12. For example, students will choose from Open, Locally Developed, Academic and Applied courses. There is some room for change, but the traditional outcomes for each of these levels is as follows: Applied courses lead to college and apprenticeships, Locally developed courses lead to the world of work and some apprenticeships, and Academic courses lead to university and/or colleges for applied degrees.

Course selection is also the opportunity for students to explore optional subjects. We encourage you to try new courses that you may not have had the chance to experience yet. Students in grades 11 and 12 also have the opportunity for some real experiential learning through Cooperative education classes that allow students to experience a field of work that currently interests them.

Most importantly, as you choose your courses, think about your past achievement in school and your own interests and skills. Explore a variety of choices that are interesting, enjoyable and challenging. Talk to your parents and your teachers because they know you best as a student and will be able to give you invaluable guidance.

# Parents/Guardians

How can parents and guardians help their students in secondary school? Often the courses are unfamiliar to parents/guardians and helping with homework is much more difficult than when students were in elementary school. The following suggestions will assist students and build the essential partnership between home and school. Insist that the student attend school regularly and punctually. Valid absences include illness; medical, dental and legal appointments; or family emergencies. Avoid family trips during school time, including exams. Encourage good study habits. Insist that homework be done regularly. Monitor employment hours as well as evening out-of-school activities. Keep in touch. If you have concerns about your son or daughter's progress, do not hesitate to call the school at 519-284-1731. We will gladly arrange interviews with Administration, Student Services or individual teachers. Stay informed by visiting the St. Marys DCVI Website at **smdcvi.amdsb.ca.**

# Course Selection

All students have the opportunity to study courses with different purposes and destinations. Courses can not be offered if only a small number of students are interested in them. The responsibility for choosing the most suitable program rests on the student and his or her parents/guardians after thorough investigation and advice from teachers and guidance counselors. Please choose wisely!

To produce the best timetable possible for students, we must know their choices at an early date. This helps us to determine the number of classes necessary for all subjects, and the actual arrangement of subject classes during the day and the year. Such planning gives maximum choice and flexibility for students. Therefore, it is necessary that students make choices which are quite firm. It is essential that all deadlines for the submission of course selection forms be met as students may be penalized for late submissions. Parent/guardian signatures are required on the course selection form. As much as possible, we will attempt to timetable the courses offered; however, low enrolment may result in the cancellation of some courses. In other instances, timetabling conflicts may result in students having to select alternate courses or take courses through our school board's online school, AMDEC.

# Course Changes: Policies and Procedures

We endeavour to have each student placed in the correct courses and we do our best to empower our students to make these important decisions. Students are an important part of the course selection process. After the timetable is created, students wishing to change a course should consult with their Student Services Counselor. Course transfers or changes must occur within the first 10 classes of the academic semester. Students in difficulty should change classes as soon as possible.

Students are expected to catch up on the work and all previous assignments to ensure an accurate evaluation. Parental approval is required when students change courses.

During course selection, students are asked to include alternate choices in case not all requested courses are able to be offered. Timetable changes made for first semester courses after mid-September are done on a student need basis.

## Learning Services Available in the School

St. Marys District Collegiate and Vocational Institute provides a variety of program options for students with special needs. School Resource Teachers are available to:

- Assist teachers in delivering individualized supports in the regular classroom
- Provide one-to-one instruction or small group assistance to students when appropriate
- Help assess special learning needs

Educational assistants are available to support students with specific needs.

## Student Success

The Ministry of Education has ensured that every school in Ontario has been allocated teacher resources to increase student success. The program is focused in four major areas at this time:

- Increasing credit accumulation in all grades, through credit rescue or recovery
- Improving transition from grade 8 to grade 9
- Creating an exit/transition program from grade 12 to the world of work
- Helping senior students achieve their graduation plans

## Guidance and Career Education Program

As students progress through high school, they will have opportunities to meet regularly with guidance counselors who are available to assist with academic, vocational and personal concerns. Guidance department members make every effort to support students as they make personal, educational and career choices. Students who wish to see a guidance counselor are encouraged to make an appointment by seeing the guidance secretary.

Students' personal needs, abilities and how they see themselves and the world will determine their performance and willingness to perform in their academic pursuits. These personal factors have a great bearing on the career directions chosen by the students. Thus, personal, academic, and career-oriented counseling are interconnected. Students may visit the following websites to assist in their planning:

- Success for Life – www.successforlife.ca
- Ontario School Counsellors' Association - www.osca.ca
- Ontario Universities' Application Centre/ Research - www.ouac.on.ca / www.OUinfo.ca
- Ontario College Application Services/Research - www.ontariocolleges.ca
- Apprenticeship Opportunities -www.edu.gov.on.ca and www.youthjobs.gov.on.ca
- My Blueprint – a planning tool also used for course selection, www.myBlueprint.ca - password smdcvi.

(All students have an account with myBlueprint as course selection occurs through this process. Parents are also invited to create an account that assists in course selection, planning and career research.)

# Student Responsibilities:

## Achievement and Attendance

Students who fail courses or choose to withdraw from a course may jeopardize their attainment of an OSSD. Regular, punctual attendance at school is critical for the student's learning and achievement of course expectations. Parents can help by ensuring that any absences are necessary and valid. If the learning process is disrupted by irregular attendance, learning experiences are lost and cannot be made up completely.

## Student Conduct

Students, staff, parent/guardians and community members have developed the St. Marys District Collegiate and Vocational Institute Code of Behaviour. It is based on expectations, rights, and responsibilities. The four key points in DCVI's Code of Behaviour include: be here, be on time, be prepared to work, be the best you can be. The following behaviours are unacceptable: physical, verbal, sexual or psychological abuse; bullying or discrimination on the basis of race, culture, religion, gender, language, disability, sexual orientation, or any other attribute. Attending school is a privilege that imposes responsibility on students. Students at St. Marys District Collegiate and Vocational Institute are expected to achieve to the best of their ability.

## 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, and 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. 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.

# 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
- Basic Welding Process and Fabricating
- 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 **collegeoftrades.ca**. 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. SHSM 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 certification and career-relevant training.

» Develop essential skills and work habits documented through the Ontario Skills Passport.

» 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.

**St. Marys DCVI offers SHSM in both Environment and Construction Engineering.**

# Construction

### High Skills Major Pathways

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

There are four categories of work in the construction industry. Each requires the use of different equipment and workers with a variety of skills. Depending on the career chosen, a graduate could work in any or all of these categories: new home building and renovation, including building, remodeling, or renovating houses and apartment buildings; Heavy industrial construction, including building industrial facilities such as cement, automotive, chemical, or power plants, refineries, and oil-sands installations; Institutional and commercial construction, including building commercial and institutional buildings and structures such as stadiums, schools, hospitals, grain elevators, and swimming pools; civil engineering construction, including engineering projects such as highways, dams, water and sewer lines, power and communication lines, and bridges.

# Environment

**High Skills Major Pathways**

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.

## Coop Course Notes:

» Summer school co-op is an option for students enrolled in a Specialist High Skills Majors

» 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.

# Avon Maitland District eLearning Centre

MDEC 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: http://amdec.avonmaitlandsecondary.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.

Students will need to visit Student Services in late May to see the course offerings for AMDEC.

# Mandatory Courses by Grade

## Grade 9 Courses at St. Marys DCVI

**Students in Grade 9 will take the following 8 Compulsory Credits**

- Canadian and World Studies - CGC1D or CGC1P
- English - ENG1D or ENG1L or ENG1P
- French - FSF1D or FSF1P
- Mathematics - MPM1D or MAT1L or MFM1P
- Science - SNC1D or SNC1L or SNC1P
- Healthy Living - PPL1OM or PPL1OF
- Introduction to Business (0.5 credit) - BTT1O
- Exploring Technologies (0.5 credit) - TIJ1O

**Choose One of the following:**

- Music - AMU1O
- Visual Arts - AVI1O
- Drama - ADA1O

## Grade 10 Courses

**Grade 10 will take the following 5 Compulsory Credits**

- Canadian and World Studies - CHC2D or CHC2L or CHC2P
- Career Studies (0.5 credit) - GLC2O
- Civics and Citizenship (0.5 credit) - CHV2O
- English - ENG2D or ENG2L or ENG2P
- Mathematics - MPM2D or MAT2L or MFM2P
- Science - SNC2D or SNC2L or SNC2P

**Choose 3 Additional Credits at the Grade 10 Level**

## Grade 11 Courses

**Students in Grade 11 will take Compulsory English and Mathematics Credits**

Students must check carefully that the requirements for any additional compulsory credits are completed.

- English - ENG3C or ENG3E or ENG3U
- Mathematics - MBF3C or MEL3E or MCF3M or MCR3U

**Choose Up to 6 Additional Credits:**

Students in Grade 11 may select a Grade 12 course if prerequisite has been completed.

## Grade 12 Courses

Students entering Grade 12 shall choose a minimum of 6 courses and must choose one English course to complete diploma requirements. Grade 12 students returning for a fifth year are welcome to register for a full course load, however are encouraged to register for the courses they intend to complete

- English - ENG4C or ENG4E or ENG4U

# Course Selections 2020-2021

## Aboriginal Studies

**NDA3M,** 1.0 credit
**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, Metis, and Inuit Peoples in Canada, Open, or Grade 10 Canadian History Since World War I, Academic or Applied.**

**NDW4M,** 1.0 credit
**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.
**Prerequisite: Any Grade 11 First Nations, Metis 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.**

## The Arts

**ADA1O,** 1.0 credit
**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.

**AMU1O,** 1.0 credit
**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.

**AVI1O,** 1.0 credit
**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.

**ADA2O,** 1.0 credit
**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.

**AMG2O,** 1.0 credit
**Music (Guitar)**
**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.

**AMU2O,** 1.0 credit
**Music (Instrumental)**
**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 instrumental music.

**AMV2O,** 1.0 credit
**Vocal 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. There will also be an emphasis on sight singing, individual and choral repertoire.

**AVI2O,** 1.0 credit
**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.

**ADA3O,** 1.0 credit
**Dramatic Arts**
**Grade 11, Open**
This course requires students to engage in dramatic processes and the presentation of dramatic works, and emphasizes the application of drama skills in other contexts and opportunities. Students will interpret and present works in a variety of dramatic forms, create and script original works, and critically analyze the processes involved in producing dramatic works. Students will develop a variety of skills related to collaboration and the presentation of dramatic works.

**AMG3M,** 1.0 credit
**Music ( Guitar)**
**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. This is a course in guitar music.
**Prerequisite: Music, Grade 9 or 10, Open**

**AMU3M,** 1.0 credit
**Music**
**Grade 11, Open**
This course provides students with opportunities to develop their musical literacy through the creation, appreciation, analysis, and performance of music, including traditional, commercial, and art music. Students will apply the creative process when performing appropriate technical exercises and repertoire and will employ the critical analysis processes when reflecting on, responding to, and analysing live and recorded performances. Students will consider the function of music in society and the impact of music on individuals and communities. They will explore how to apply skills developed in music to their life and careers.
**Prerequisite: Music, Grade 9 or 10, Open**

**AMV3M,** 1.0 credit
**Vocal 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. There will also be an emphasis on sight-singing, individual and choral repertoire.
**Prerequisite: Music, Grade 9 or 10, Open**

**AVI3O,** 1.0 credit
**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.

**ADA4M,** 1.0 credit
**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 text and media sources while learning about various theories of directing and acting. Students will examine the significance of dramatic arts in various cultures, and will analyze how the knowledge and skills developed in drama are related to their personal skills, social awareness, and goals beyond secondary school.
**Prerequisite: Drama, Grade 11, University/ College Preparation**

**AMG4M,** 1.0 credit
**Music ( Guitar)**
**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 analyze how to apply skills developed in music to their life and careers. This is a course in guitar music.
**Prerequisite: Music, Grade 11, University/ College Preparation**

**AMU4M,** 1.0 credit
**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 analyze how to apply skills developed in music to their life and careers.
**Prerequisite: Music, Grade 11, University/ College Preparation**

**AMV4M,** 1.0 credit
**Vocal 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 analyze how to apply skills developed in music to their life and careers. There will also be an emphasis on sight-singing, individual and choral repertoire.
**Prerequisite: Music, Grade 11, University/ College Preparation**

**AVI4M,** 1.0 credit
**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: Visual Arts, Grade 11, Open**

# Business

**BTT1O,** 0.5 Credit
**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.

**ICS20,** 1.0 credit
**Introduction to Computer Studies**
**Grade 10, Open**
This course introduces students to computer programming. Students will plan and write simple computer programs by applying fundamental programming concepts and learn to create clear and maintainable internal documentation. They will also learn to manage a computer by studying hardware configurations, software selection, operating system functions, networking, and safe computing practices. Students will also investigate the social impact of computer technologies, and develop an understanding of environmental and ethical issues related to the use of computers.

**ICS3C,** 1.0 credit
**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,** 1.0 credit
**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.

**ICS4C,** 1.0 credit
**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 : Grade 11 Introduction to Computer Programming, College**

# Canadian & World Studies

**CGC1D,** 1.0 credit
**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.

**CGC1P,** 1.0 credit
**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.

**CHC2D,** 1.0 credit
**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.

**CHC2L,** 1.0 credit
**Canadian History**
**Grade 10, Locally Developed**
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,** 1.0 credit
**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.

**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.

**CHW3M,** 1.0 credit
**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**

**CLU3M,** 1.0 credit
**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**

**CGR4E,** 1.0 credit
**Living in a Sustainable World**
**Grade 12, Workplace Preparation**
This course examines the impact of human activity on the natural environment. Students will explore the use of natural spaces and resources and how planning decisions and consumer choices affect natural systems. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate practical solutions to environmental issues, enabling them to make more sustainable decisions at home and in the workplace. Prerequisite: Canadian Geographic Issues, Grade 9, Academic or Applied.
**Prerequisite: Canadian Geographic Issues, Grade 9, Academic or Applied.**

**CGR4M,** 1.0 credit
**The Environment and Resource Management**
**Grade 12, University/College Preparation**
This course explores interactions between the natural and human environment, with a particular focus on the impact of human activity on various ecosystems. Students will explore resource management and sustainability practices, as well as related government policy and international protocols. Applying the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, students will investigate the relationship between people and the natural environment and will propose approaches for developing more sustainable relationships, including environmentally responsible actions that support stewardship.
**Prerequisite: Any university, university/college, or college preparation course in Canadian and world studies, English, or social sciences and humanities.**

**CGW4C,** 1.0 credit
**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: Canadian Geographic Issues, Grade 9, Academic or Applied**

**CGW4U,** 1.0 credit
**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 or university/ college preparation course in Canadian and world studies, English, or social sciences and humanities**

**CHM4E,** 1.0 credit
**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: Canadian History since World War I, Grade 10, Academic or Applied, or a locally developed compulsory course (LDCC)**

**CHY4C,** 1.0 credit
**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, university/ college, or college preparation course in Canadian and world studies, English, or social sciences and humanities**

**CHY4U,** 1.0 credit
**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: Any university or university/ college preparation course in Canadian and world studies, English, or social sciences and humanities.**

**CIC4E**
**Making Personal Economic Choices**
This course provides students with a fundamental understanding of a variety of key economic issues and practices, helping them develop their ability to make informed economic choices in their day-to-day lives. Students will learn about personal budgeting, taxes, credit and debt, and savings and investment, as well as various economic issues, such as those related to the underground economy, economic inequality, and consumer behaviour.

Students will investigate various economic issues and analyse the impact of economic decisions, including their own decisions, at the individual, community, and national levels. **Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied, or the locally developed compulsory course (LDCC) in Canadian history.**

# English

**ENG1D,** 1.0 credit
**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.

**ENG1L,** 1.0 credit
**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,** 1.0 credit
**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.

**ENG2D,** 1.0 credit
**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 9, Academic or Applied**

**ENG2L,** 1.0 credit
**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: a Grade 9 English credit**

**ENG2P,** 1.0 credit
**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**

**ENG3C,** 1.0 credit
**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**

**ENG3E,** 1.0 credit
**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, Applied or Locally Developed**

**ENG3U,** 1.0 credit
**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**

**ENG4C,** 1.0 credit
**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, College Preparation**

**ENG4E,** 1.0 credit
**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, Workplace Preparation**

**ENG4U,** 1.0 credit
**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**

**EWC4C,** 1.0 credit
**The Writer's Craft**
**Grade 12, College Preparation**
This course emphasizes knowledge and skills related to the craft of writing. Students will investigate models of effective writing; use a workshop approach to write a variety of works; and make considered decisions for improving the quality of their writing. They will also complete a creative or analytical independent study project and investigate opportunities for publication and for writing careers.
**Prerequisite: English, Grade 11, College Preparation.**

**EWC4U,** 1.0 credit
**The Writer's Craft**
**Grade 12, University Preparation**
This course emphasizes knowledge and skills related to the craft of writing. Students will analyze models of effective writing; use a workshop approach to produce a range of works; identify and use techniques required for specialized forms of writing; and identify effective ways to improve the quality of their writing. They will also complete a major paper as part of a creative or analytical independent study project and investigate opportunities for publication and for writing careers.
**Prerequisite: English, Grade 11, University Preparation.**

**OLC3O-OLC4O**
**Ontario Secondary School Literacy Course**
**Grade 11/12**
This course is designed to help students acquire and demonstrate the cross-curricular literacy skills that are evaluated by the Ontario Secondary School Literacy Test (OSSLT). Students who complete the course successfully will meet the provincial literacy requirement for graduation. Students will read a variety of informational, narrative, and graphic texts and will produce a variety of forms of writing, including summaries, information paragraphs, opinion pieces, and news reports. Students will also maintain and manage a portfolio containing a record of their reading experiences and samples of their writing. Eligibility requirement: Students will be placed in this course by Student Services or Administration. Students must have been eligible to write the OSSLT at least once and have been unsuccessful in their attempt to take the course.

# French

**FSF1D,** 1.0 credit
**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,** 1.0 credit
**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: Minimum of 600 hours of elementary Core French instruction, or equivalent**

**FSF2D,** 1.0 credit
**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 9, Academic or Applied**

**FSF3U,** 1.0 credit
**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 10, Academic**

**FSF4U,** 1.0 credit
**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: Core French, Grade 11, University Preparation**

# Guidance & Career Education

**GLN40**
**Navigating the Workplace**
**Grade 12, Open**
This course provides students with opportunities to develop the workplace essential skills and work habits required for success in all types of workplaces. Students will explore occupations and careers of interest through participation in real workplace experiences.They will make plans for continued learning and work, work with others to design learning experiences, and investigate the resources and support required to make a smooth transition to their postsecondary destination.

**GLS1O,** 1.0 credit
**Learning Strategies 1: Skills for Success in Secondary School**
**Grade 9, Open**
This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace, and the community.

The course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond. **Prerequisite for GLS 1O is the recommendation of the principal.**

**GLC2O,** 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.

**GLD2O,** 1.0 credit
**Discovering the Workplace**
**Grade 10, Open**

This course provides students with opportunities to discover and develop the workplace essential skills and work habits required to be successfully employed. Students will develop an understanding of work through practical hands-on experiences in the school and in the community, using real workplace materials. They investigate occupations of interest through experiential learning opportunities, such as work site visits, job shadowing,work experience, simulations, and entrepreneurial projects. This course helps students make plans for continued learning and work.

**GPP3O,** 1.0 credit
**Leadership and Peer Support**
**Grade 11, Open**
This course prepares students to act in leadership and peer support roles. They will design and implement a plan for contributing to their school and/or community; develop skills in communication, interpersonal relations, teamwork, and conflict management; and apply those skills in leadership and/or peer support roles B for example, as a student council member or a peer tutor. Students will examine group dynamics and learn the value of diversity within groups and communities.

# Health & Physical Education

**PPL1OFE,** 1.0 credit
**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 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. This course is for females only.

**PPL1OMA,** 1.0 credit
**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 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. This course is for males only.

**PPL2O,** 1.0 credit
**Healthy Active Living Education**
**Grade 10, 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.

**PAF3O,** 1.0 credit
**Personal and Fitness Activities**
**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. Emphasis will be placed on participation in activities which maximize opportunities for fitness improvement and maintenance such as aerobics, pilates, yoga, power walking and weight training.

**PPL3O,** 1.0 credit
**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. Emphasis will be placed on participation in activities which maximize opportunities for fitness improvement and maintenance such as aerobics, pilates, yoga, power walking and weight training.

**PAF4O,** 1.0 credit
**Healthy Active Living Education**
**Grade 12, 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. Emphasis will be placed on participation in activities which maximize opportunities for fitness improvement and maintenance such as aerobics, pilates, yoga, power walking and weight training.

**PPL4O,** 1.0 credit
**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 throughout 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.

**PSK4U,** 1.0 credit
**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 and performance, the evolution of physical activity and sport, and the physiological, psychological, and social factors that influence an individual's participation in physical activity and sport. The course prepares students for university programs in physical education and health, kinesiology, health sciences, health studies, recreation, and sports administration.
**Prerequisite: Any Grade 11 university or university/college preparation course in science, or any Grade 11 or 12 course in health and physical education**

# Interdisciplinary Studies

**IDC30-PR,** 1.0 credit
**Interdisciplinary Studies - Project/Research Based**
**Grade 11, Open**
This course will help students combine 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. Through individual and collaborative inquiry and research, students will analyse the connections among diverse subjects and disciplines; Develop information literacy skills in analysing, selecting, evaluating and communicating information; and become aware of a variety of resources and viewpoints on contemporary issues. They will also examine their own learning styles, relate their inquiries and research to real-life situations, and investigate career opportunities in new disciplines. This course is independent research based.

**IDC3O-RB,** 1.0 credit
**Interdisciplinary Studies - Robotics**
**Grade 11, Open**
This course will help students combine 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. Through individual and collaborative inquiry and research, students will analyse the connections among diverse subjects and disciplines; develop information literacy skills in analysing, selecting, evaluating, and communicating information; and become aware of a variety of resources and viewpoints on contemporary issues. They will also examine their own learning styles, relate their inquiries and research to real-life situations, and investigate career opportunities in new disciplines. This course is TECH BASED and will focus on ROBOTICS.

**IDC3O-CC,** 1.0 credit
**Interdisciplinary Studies - Community and Culture**
**Grade 11, Open**
This course will help students combine 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. Through individual and collaborative inquiry and research, students will analyse the connections among diverse subjects and disciplines; Develop information literacy skills in analysing, selecting, evaluating and communicating information; and become aware of a variety of resources and viewpoints on contemporary issues. They will also examine their own learning styles, relate their inquiries and research to real-life situations, and investigate career opportunities in new disciplines. This course is designed for students interested in community, culture and leadership.

**IDC4O-PR,** 1.0 credit
**Interdisciplinary Studies - Project/Research Based**
**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 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. This course is independent research based.

**IDC4O-RB,** 1.0 credit
**Interdisciplinary Studies - Robotics**
**Grade 12, Open**
This course will help students combine 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. Through individual and collaborative inquiry and research, students will analyse the connections among diverse subjects and disciplines; develop information literacy skills in analysing, selecting, evaluating, and communicating information; and become

aware of a variety of resources and viewpoints on contemporary issues. They will also examine their own learning styles, relate their inquiries and research to real-life situations, and investigate career opportunities in new disciplines. This course is TECH BASED and will focus on ROBOTICS.

**IDC4O-CC,** 1.0 credit
**Interdisciplinary Studies - Community and Culture**
**Grade 12, Open**
This course will help students combine 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. Through individual and collaborative inquiry and research, students will analyse the connections among diverse subjects and disciplines; Develop information literacy skills in analysing, selecting, evaluating and communicating information; and become aware of a variety of resources and viewpoints on contemporary issues. They will also examine their own learning styles, relate their inquiries and research to real-life situations, and investigate career opportunities in new disciplines. This course is for students interested in community, culture and leadership.

**IDC4U-PR,** 1.0 credit
**Interdisciplinary Studies- Project/Research Based**
**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 analyze historical innovations and exemplary research; and to investigate real-life situations and career opportunities in interdisciplinary endeavors. 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. This course is independent research based.
**Prerequisite: Any university or university/ college preparation course**

**IDC4U-RB,** 1.0 credit
**Interdisciplinary Studies - Robotics**
**Grade 12, University Preparation**
This course will help students combine 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. Through individual and collaborative inquiry and research, students will analyse the connections among diverse subjects and disciplines; develop information literacy skills in analysing, selecting, evaluating, and communicating information; and become aware of a variety of resources and viewpoints on contemporary issues. They will also examine their own learning styles, relate their inquiries and research to real-life situations, and investigate career opportunities in new disciplines. This course is TECH BASED and will focus on ROBOTICS.

**IDC4U-CC,** 1.0 credit
**Interdisciplinary Studies - Community and Culture**
**Grade 12, University Preparation**
This course will help students combine 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. Through individual and collaborative inquiry and research, students will analyse the connections among diverse subjects and disciplines; Develop information literacy skills in analysing, selecting, evaluating and communicating information; and become aware of a variety of resources and viewpoints on contemporary issues. They will also examine their own learning styles, relate their inquiries and research to real-life situations, and investigate career opportunities in new disciplines. This course is for students interested in community, culture and leadership.

**Prerequisite: Any university or university/ college preparation course**

# Mathematics

**MPM1D,** 1.0 credit
**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.

**MAT1L,** 1.0 credit
**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 and in the Grade 10 LDCC course. The course is organized by 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.

**MFM1P,** 1.0 credit
**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.

**MPM2D,** 1.0 credit
**Principles of Mathematics**
**Grade 10, Academic**

This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic relations and

their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute triangles. Students will reason mathematically and communicate their thinking as they solve multi-step problems.
**Prerequisite: Grade 9 Mathematics: Academic**

**MAT2L,** 1.0 credit
**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 courses. The course is organized in three major 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: A Grade 9 Mathematics credit**

**MFM2P,** 1.0 credit
**Foundations of Mathematics**
**Grade 10, Applied**
This course enables students to consolidate their understanding of linear relations 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: Grade 9 Mathematics: Applied or Academic**

**MBF3C,** 1.0 credit
**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 skill as they solve problems and communicate their thinking.
**Prerequisite: Foundations of Mathematics, Grade 10, Applied**

**MCF3M,** 1.0 credit
**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: Foundations of Mathematics, Grade 10 Academic or Applied**

**MCR3U,** 1.0 credit
**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**

**MEL3E,** 1.0 credit
**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: Principles of Mathematics, Grade 9, Academic or Foundations of Mathematics Grade 9 Applied or Mathematics, Grade 10, Locally Developed**

**MAP4C,** 1.0 credit
**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: Foundations for College Mathematics, Grade 11, College Preparation**

**MCT4C,** 1.0 credit
**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.
**Prerequisite: Functions and Applications, Grade 11, University/College Preparation**

**MCV4U,** 1.0 credit
**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 realworld relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who plan to study mathematics in university and who may choose to pursue careers in fields such as physics and engineering.
**Note: Advanced Functions must/should be taken concurrently with or can precede Calculus and Vectors (MCV4U is a co-requisite with MHF4U).**

**MDM4U,** 1.0 credit
**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: Functions and Applications, Grade 11, University/College Preparation, or Functions, Grade 11, University Preparation**

**MEL4E,** 1.0 credit
**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: Mathematics for Work and Everyday Life, Grade 11, Workplace**

**MHF4U,** 1.0 credit
**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**

# Science

**SNC1D,** 1.0 credit
**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.

**SNC1L,** 1.0 credit
**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,** 1.0 credit
**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.

**SNC2D,** 1.0 credit
**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,Äìbase reactions; forces that affect climate and climate change; and the interaction of light and matter.
**Prerequisite: Science, Grade 9, Academic or Applied**

**SNC2L,** 1.0 credit
**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.

**SNC2P,** 1.0 credit
**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 9, Academic or Applied**

**SBI3C,** 1.0 credit
**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 or Applied**

**SBI3U,** 1.0 credit
**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,** 1.0 credit
**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,** 1.0 credit
**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 10, Academic**

**SVN3E,** 1.0 credit
**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: Science, Grade 9, Academic or Applied, or Grade 9 or 10 locally developed compulsory credit (LDCC) course in science**

**SVM3M,** 1.0 credit
**Environmental Science**
**Grade 11, College/University**
This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in life after secondary school. Students will explore a range of topics, including the role of science in addressing contemporary environmental challenges; the impact of the environment on human health; sustainable agriculture and forestry; the reduction and management of waste; and the conservation of energy. Students will increase their scientific and environmental literacy and examine the interrelationships between science, the environment, and society in a variety of areas.
**Prerequisite: Grade 10 Science, Applied or Academic**

**SBI4U,** 1.0 credit
**Biology**
**Grade 12, University Preparation**
This course provides students with the opportunity for in-depth study of the concepts and processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biochemistry, metabolic processes, molecular genetics, homeostasis, and population dynamics. Emphasis will be placed on the achievement of detailed knowledge and the refinement of skills needed for further study in various branches of the life sciences and related fields.
**Prerequisite: Biology, Grade 11, University Preparation**

**SCH4C,** 1.0 credit
**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: Science, Grade 10, Academic or Applied**

**SCH4U,** 1.0 credit
**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: Chemistry, Grade 11, University Preparation**

**SNC4M,** 1.0 credit
**Health 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.
**Prerequisite: Science, Grade 10 Academic or any grade 11 University, university/ college or college course in Science.**

**SPH4C,** 1.0 credit
**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: Science, Grade 10, Academic or Applied**

**SPH4U,** 1.0 credit
**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: Physics, Grade 11, University Preparation**

# Social Science & Humanities

**HFN2O,** 1.0 credit
**Food and Nutrition**
**Grade 10, Open**
This course focuses on guidelines for making nutritious food choices. Students will investigate factors that influence food choices, including beliefs, attitudes, current trends, traditional eating patterns, food marketing strategies, and individual needs.

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.

**HFC3M,** 1.0 credit
**Food and Culture**
**Grade 11, University/College Preparation**
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.

**HFC3E,** 1.0 credit
**Food and Culture**
**Grade 11, Workplace Preparation**
This course focuses on the flavours, aromas, cooking techniques, foods, and cultural traditions of world cuisines. Students will demonstrate the ability to cook with ingredients and equipment from a range of cultures, describe food-related etiquette in a variety of countries and cultures, and explore ways in which Canadian food choices and traditions have been influenced by other cultures. Students will have opportunities to develop practical skills and apply research skills as they investigate foods and food practices from around the world.

**HPC3O,** 1.0 credit
**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.

**HSP3C,** 1.0 credit
**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. They will be given opportunities to apply theories from a variety of perspectives, to conduct social science research, and to become familiar with current issues within the three disciplines.

**HSP3U,** 1.0 credit
**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.
**Prerequisite: The Grade 10 academic course in English or the Grade 10 academic history course (Canadian and world studies).**

**HFA4C,** 1.0 credit
**Nutrition and Health**
**Grade 12, University Preparation**
This course focuses on the relationship between nutrition and health at different stages of life and on global issues related to food production. Students will investigate the role of nutrition in health and disease and assess strategies for promoting food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food-preparation techniques, and refine their ability to use social science research and inquiry methods to investigate topics related to nutrition and health.
**Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies.**

**HFA4U,** 1.0 credit
**Nutrition and Health**
**Grade 12, University Preparation**
This course examines the relationships between food, energy balance, and nutritional status; the nutritional needs of individuals at different stages of life; and the role of nutrition in health and disease. Students will evaluate nutrition-related trends and will determine how food choices can promote food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food-preparation techniques, and develop their social science research skills by investigating issues related to nutrition and health.
**Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies.**

**HHS4C,** 1.0 credit
**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, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies.**

**HHS4U,** 1.0 credit
**Families in Canada**
**Grade 12, College 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.**

**HIP4O,** 1.0 credit
**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.

# Technological Education

**TIJ1O,** 0.5 Credit
**Exploring Technologies**
**Grade 9, Open**
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.

**TCJ2O,** 1.0 credit
**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.

**TDJ2O,** 1.0 credit
**Technological Design**
**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 postsecondary education and training leading to careers in the field.

**TMJ2O,** 1.0 credit
**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.

**TTJ2O,** 1.0 credit
**Transportation Technology**
**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 postsecondary pathways leading to careers in the transportation industry.

**TXJ2O,** 1.0 credit
**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 analyzes, and treatments. Students also consider related environmental and societal issues and explore secondary and postsecondary pathways leading to careers in the field of hairstyling and aesthetics.

**TCJ3C,** 1.0 credit
**Construction Engineering Technology**
**Grade 11, 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 explore career opportunities in the field.

**TCJ3E,** 1.0 credit
**Construction Technology**
**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 explore postsecondary and career opportunities in the field.

**TDJ3M,** 1.0 credit
**Technological Design**
**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.

**TMJ3C,** 1.0 credit
**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.

**TMJ3E,** 1.0 credit
**Manufacturing Technology**
**Grade 11, Workplace Preparation**

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.

**TTJ3C,** 1.0 credit
**Transportation Technology**
**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.

**TXJ3E,** 1.0 credit
**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 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 consider environmental and societal issues related to the industry and acquire a more detailed knowledge of apprenticeships and direct entry work positions.

**TCJ4C,** 1.0 credit
**Construction Engineering Technology**
**Grade 12, College Preparation**
This course enables students to further develop knowledge and skills related to residentialThis 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 explore career opportunities in the field.
**Prerequisite: Construction Engineering Technology, Grade 11, College Preparation**

**TCJ4E,** 1.0 credit
**Construction Technology**
**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 explore entrepreneurship and career opportunities in the industry that may be pursued directly after graduation.
**Prerequisite: Construction Technology, Grade 11, Workplace Preparation**

**TDJ4M,** 1.0 credit
**Technological Design**
**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 explore career opportunities and the postsecondary education and training requirements for them.
**Prerequisite: Technological Design, Grade 11, University/College Preparation**

**TMJ4C,** 1.0 credit
**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**

**TMJ4E,** 1.0 credit
**Manufacturing Technology**
**Grade 12, Workplace Preparation**
This project-driven, hands-on course builds on students,Äô 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.
**Prerequisite: Manufacturing Technology, Grade 11, Workplace Preparation**

**TTJ4C,** 1.0 credit
**Transportation Technology**
**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.
**Prerequisite: Transportation Technology, College Preparation, Grade 11**

**TTJ4E,** 1.0 credit
**Transportation Technology: Vehicle Maintenance**
**Grade 12, Workplace Preparation**
This course introduces students to the servicing, repair, and maintenance of vehicles through practical applications. The course is appropriate for all students as a general interest course to prepare them for future vehicle operation, care, and maintenance or for entry into an apprenticeship in the motive power trades. Students will develop an awareness of environmental and societal issues related to transportation and will learn about careers in the transportation industry and the skills and training required for them.

**TXJ4E,** 1.0 credit
**Hairstyling and 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 expand their understanding of environmental and societal issues and their knowledge of postsecondary destinations in the hairstyling and aesthetics industry.
**Prerequisite: Hairstyling and Aesthetics, Grade 11, Workplace Preparation**

COURSE CALENDAR 2020-2021

# St. Marys District Collegiate & Vocational Institute