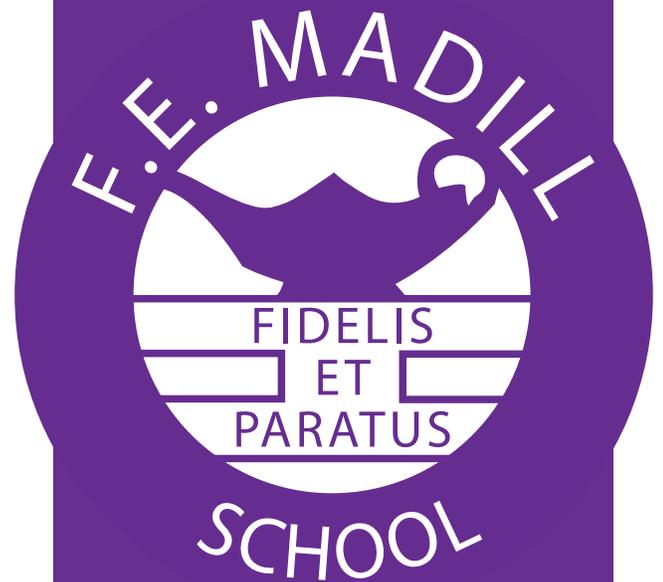


F.E. Madill  
Secondary School

Avon Maitland  
District School Board  
**Secondary Schools**



Program & Course  
**Course Calendar**  
**2017-2018**

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# FEMSS Course Calendar 2017 - 2018

By Debbie Green - Principal

The Avon Maitland District School Board is committed to ensuring all students have access to quality pathway programming, and the opportunity for those on the pathway to a diploma to graduate secondary school in four years. There is also a commitment to ensure a variety of course offerings are available for all students. In order to achieve both goals, students need to be registered full time in each semester. Students in Avon Maitland District School Board secondary schools are required to register with a sufficient number of courses to be considered full time for each semester in which they attend our schools.

This course calendar contains a wealth of information to help you make appropriate choices regarding your academic career. More information is also available on the school website (<http://femadill.com>). Please read it carefully and consider all of the options and opportunities that are available. I encourage you to discuss your choices with your parents, your teachers and a guidance counsellor or, where appropriate, a special education resource teacher before making final decisions.

Please remember to choose your program with an eye on your expected destination. The large variety of courses offered at F. E. Madill will provide you with the academic and social foundation for any of the possible pathways you choose when you leave secondary school. The courses you select must fulfill the requirements needed for entry into your chosen pathway: apprenticeship, college, university or the world of work. Even if you are entering grade 9 or 10, your possible destination should be considered when choosing courses. You will choose from locally developed, open, applied, or academic courses. Students planning to take university preparation courses in grades 11 and 12 should take academic courses in grades 9 and 10. Students hoping to take college preparation courses in grades 11 and 12 can take either academic or applied courses in grades 9 and 10, but it is a good idea to look ahead at the prerequisites and recommendations. I also encourage you to consider the skilled trades as your career destination. There are many trades and apprenticeships that can begin while you are still in high school, through OYAP. Please consult your guidance counsellor or a coop teacher for more information on the apprenticeships that are available and the entry requirements.

There are other important factors to think about as well. You should consider your past achievement in school, the mix of courses which you feel will bring success (both compulsory and optional) and your own interests. Explore the variety of choices and you will find courses that will be interesting and enjoyable, as well as challenging. There are many considerations involved in selecting courses for next year. Take your time, think about the many factors involved, and consult those who know you best as a student - your parents and teachers.

Notes:

For students entering grade 9 in 2017, I want to stress the importance of discussing your choices with your grade 8 teacher(s), and listening to their advice. Space in courses is often

limited, so making the right choice the first time will increase your chance of getting into the courses most appropriate to you and your future.

Course selection for all students will be done online through the highschool planner in the student's Individual Pathway Plan (IPP) on myBlueprint. Instructions for this will be given during the guidance in-class course selection sessions. Incoming grade 9 students will do course selection after guidance counsellors have visited the elementary classrooms in December and January.

## **School Goals and Philosophy**

F.E. Madill provides a positive learning environment fostering high standards in academic and co-curricular pursuits. The school, in partnership with the community, values creativity, respect, fairness, trust and good citizenship. Our school goal is to maximize success for all of our students in all areas. We believe that every student has the potential to succeed and every student can learn. Madill offers a wide variety of programs and activities for our students. It is through this variety of programs that we are able to meet the needs of all of our students. We are very proud of our students and their achievements. We have a dedicated staff who care about students. They work hard to ensure that each of our students is successful and becomes a contributing member of society.

## **Next Generation Learning**

All schools in the Avon Maitland District School Board support Next Generation Learning of our students. To ensure students develop the 21st Century Skills they will require, students in grades 7-11 are provided with a device. Typically, this device is an iPad. These iPads are the property of the Avon Maitland District School Board, and are issued to students as an educational tool and should be used in that capacity. Students, and their families, are responsible to follow the requirements of the Board's computer use policy. In addition, students and their families are responsible for the security and care of the iPad at all times. The iPads have warranty protection, which covers the device for manufacturing defects (for two years) and provides coverage for two instances of accidental damage in the first two years, with a \$50 deductible charge for each instance. More information is provided to students and their families when the iPad is distributed to students who are registered at F.E. Madill. Information is also available on the Avon Maitland District School Board website.

## **Inter-School Athletics and Co-Curricular Programs**

### **Clubs and Activities**

Teams and activities are an important aspect of Madill's co-curricular offerings. Students who participate are able to earn points toward the school letter, "The Big M", which is based on the three prongs of academics, athletics and activities. Long after graduation, participation in co-curricular activities will bring back many positive memories.

Madill has clubs and activities for a broad range of interests and tastes. If theatre is your interest, join the drama club; they produce outstanding plays and musicals. If music is your interest, why not learn to play an instrument? We have different types of bands to match

your interests. Other clubs at Madill include Yearbook, Student Council, OSAID, Peer Mentors, Peer Tutors, Mustangs Making a Difference and even Reach for the Top (as seen on TV).

By joining clubs, you have the opportunity to attend fun and exciting workshops, tournaments and competitions, where you will gain valuable experience. You also have a chance to improve skills that may help you in the future, and the opportunity to meet other students with the same interests.

## **Athletics**

Madill offers an opportunity for athletes to compete in a wide variety of sports. Athletes on school teams practice regularly under the direction of a skilled coaching staff. Usually a student who is a regular member of a school team achieves high levels of fitness and skill performance. He or she does this in an environment where fair play and good sportsmanship are stressed. Depending on the activity, Madill's coaching staff holds practices before and after the school day. Most practices are 1.5 to 2 hours in length and regular attendance is required.

Madill is a member of the Huron Perth Athletic Conference, which is composed of eleven schools. There are some exciting competitions as Madill's purple and white Mustangs compete with other schools in the conference, where Madill athletes are known for their dedication to sport and to the pursuit of excellence. Each season, Madill has a generous share of Huron Perth Conference, WOSSAA (Western Ontario), and OFSAA (Ontario) honours. On the walls of the gymnasium hang numerous pennants won by teams, testimony to the school's successes through the years.

The athletic year at Madill has three seasons with boys volleyball, girls basketball, cross-country running, 7's rugby, and golf offered in the fall; girls volleyball, boys basketball, Nordic skiing, hockey, curling, and swimming offered in the winter; and badminton, soccer, rugby and track and field offered in the spring. There are plenty of opportunities for athletes at Madill to become part of inter-school athletics. Not only is it a chance to develop individual and team skills and play some exciting sports, but many athletes take this opportunity to build lasting friendships.

In addition to the competitive varsity sports teams, Madill occasionally offers a special lunch hour sports program. This program gives students the chance to be involved in fun, social activities promoting healthy active living.

## **School Support Services and Resources**

### **Resource Centre**

The F.E. Madill library resource centre, which is open from 8:30 to 4:00, is staffed by a teacher-librarian and a technical resource assistant. The resource collection includes a large number of fiction, non-fiction and reference books which may be searched by title, author or subject using the computerized catalogue. This library catalogue and a number of excellent databases may also be accessed from home by linking to the library website from the school's website. There are a variety of magazines available for leisure reading

and for research. Thirty computers are available in the resource centre lab for school-related use when not reserved for a class. Wireless internet access is also available in the library and throughout the school. Each year, the library runs the White Pine and Red Maple Reading Programs and all students are welcome to participate.

## **Special Education Services**

The F.E. Madill special education department, in consultation with the school principal, offers a range of services to support exceptional students, parents/guardians and teachers. The individual learning needs of each student determine the specialized support required with academic and social inclusion as the primary goals. The majority of students meet success in regular classrooms with program accommodations and environmental supports. The resource room is available throughout the day to assist in accommodation supports that may include technological supports, test and exam writing assistance and social/emotional respite.

The F.E. Madill special education department facilitates specialized support services through the school board and community agencies. Physiotherapy, occupational therapy, educational assessments, blind and low vision, deaf and hearing impaired and behavior specialists work with our department and with families to improve educational programming.

If you would like to discuss how our department can assist your family, please contact one of our special education resource teachers at 519-357-1800 ext. 439.

## **Student Success (SS)**

Our goal is that every student at FEMSS will have the best high school experience possible. To support this, the SS Room offers an environment outside the regular classroom that is available to all students in the school. Students may use this room during class time (in collaboration with their classroom teacher) and/or during the lunch hour, to receive extra help with any academic or social difficulties they may be having. The room is supported with several computer stations, as well as a variety of classroom supplies. The SS Snack Program is offered out of the SS Room on a daily basis and is available to all students free of charge. While the SS Teacher assists students of all grade levels, there is particular focus on students who are making the transition into high school. To ensure a smooth transition, the SS teacher meets with grade 8 staff and students and also seeks assistance from senior Madill students who volunteer with the Peer Mentor Program. The SS Team, involving our principal, vice-principals, guidance counsellors, SERT, COPE teacher, and SS teachers, meets bi-weekly to address student needs. Please contact one of our SS teachers at ext 429 for more information.

## **C.O.P.E. (Cooperative Opportunities Providing Education)**

C.O.P.E. is an alternative education program offered to students who are experiencing issues preventing their progress in school. It is a continuous entry program, often including a coop experience. For more information, please contact a school administrator at Madill 519-357-1800.

## **Guidance and Career Education Program**

As students progress through grades 9 through 12, they will have opportunities to meet regularly with guidance counsellors who are available to assist with academic, vocational and personal concerns. Students who wish to see a guidance counsellor are encouraged to make an appointment by seeing the guidance secretary.

Grade 9 to 12 students experiencing academic difficulty in a particular course are encouraged to seek help from their teacher and then, if needed, come to the guidance office to request a peer tutor. Recommended and/or volunteer students offer help to those wishing to access this service. More information is available upon request at the guidance office.

The compulsory career studies course, which is normally taken in grade 10 in conjunction with civics, is an integral part of the career planning program as students consider their own strengths, skills and interests when looking at postsecondary destinations.

It is essential that students have the necessary requirements for admission to the postsecondary career and/or institution which they are planning to attend. There are a number of excellent web-based planning tools for use by students and parents, as they offer insight into what is required to prepare for many different careers. [myBlueprint.ca](http://myBlueprint.ca) is a tool for the Individual Planning Process through school and beyond and is also used in the course selection process each year. Students require a school activation key in order to set up an account for the first time. The school activation key for MyBlueprint is available in the guidance office or by contacting the school. Hard copy information (postsecondary calendars and brochures) about colleges, universities, private schools, apprenticeships and specific careers is available on a loan basis from the guidance office. Most postsecondary destinations have a website and the guidance office also makes these addresses readily available.

Guidance counsellors meet with students of all grade levels in a classroom setting to discuss course selection for the upcoming school year. Many student questions will be addressed at that time. If questions or concerns are still not answered, students should make a guidance appointment following the classroom visit.

The final responsibility for the selection of courses rests with the student and parent. Again this year, course selection for grades 9 to 12 will take place online and parents will want to discuss the process with their child. During the classroom visits, students will be given a sheet of instructions on how to use the online course selection tool. Course selection must be completed no later than Friday, February 10, 2017 (January 27, 2017 for students entering grade 9). Since it may be difficult to change course selections after this date, students must choose carefully. If further help is required, feel free to contact the guidance office at 357-1800 and ask for one of the guidance counsellors - Mr. R. Stryker, Mrs D. Metcalfe or Mrs. C. Trick. We invite all parents/guardians to take an active role as your children plan their future at Madill and beyond.

## **Course Changes: Policies and Procedures**

Students wishing to change a course should make an appointment with a guidance counsellor. Students, in consultation with their parents, are encouraged to make informed

choices during the course selection process, which takes place during January and February. There will be opportunities to consider adjustments to these choices later in the school year as second term marks become available. Students or parents are asked to contact the guidance office to discuss the possibilities for change of choices as early as possible.

Once the timetable for the following year has been created, changes will be made subject to availability of space in the course of choice and the constraints of the student's timetable. New courses at day school may be added to a student's timetable until the end of the second week of classes in each semester. After this time, course type changes may be possible and courses may be dropped by students in a position to carry fewer courses, but no new day school courses may be added. A student wishing to have a study period must have at least 16 credits. To comply with the Ministry of Education's policy on full disclosure, senior courses which are dropped five days or more after the first formal report card, become part of the student's permanent record and are recorded on the student's OST (transcript). Please note that all students are expected to maintain a full time schedule (three or four classes each semester).

## **Student Responsibilities and Attendance**

Students who fail courses or choose to withdraw from a course may jeopardize their attainment of an OSSD. Regular attendance at school is one of the most important ingredients for success in school and is critical for achievement of course expectations. Specific attendance policies and procedures at F.E. Madill are posted on the school's website under the Student Handbook tab.

## **Student Fees**

There will be no fees or cost charged to students to participate in the regular day school program. Fees may be charged where the student chooses to upgrade the material or where purchase of material is optional. Students enrolled in secondary schools in Avon Maitland District School Board can expect to be provided with the basic classroom learning resources that are required in order to complete the course expectations. It is recognized there may be optional resources that students may purchase to enhance their program; (e.g. field trips, upgrading materials in courses such as construction technology and visual arts).

Students are expected to come to school ready and willing to participate actively in their own learning. To that end, students are expected to bring materials with them for their own personal note-taking (e.g. pencils, pens, paper, binders).

Students are encouraged to purchase their school's student card by paying the student activity fee. The student card includes but is not limited to the benefit of participating in the co-instructional program and in the Student Council dances and activities. 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.

## School Cash Online

School Cash Online is an online parent portal that offers a safe, fast and convenient way to pay for school activity fees. The portal allows parents to add students, make payments, check current balance / activity history, print or view receipts, and receive notifications about upcoming events.

### With School Cash Online, you will be able to:

- ⦿ Pay for your child's school fees online. Anytime, anywhere.
- ⦿ Avoid the hassle of having cash on-hand to pay for school items or fees.
- ⦿ Get automatic email notifications about school fees.
- ⦿ Help us reduce the amount of cash in our schools.

School Cash Online is fast, safe and convenient!

## Ontario Code of Conduct

The Ontario Code of Conduct is intended to assist students in their personal growth toward becoming mature, productive members of society. This growth should emphasize self respect, respect for the rights of others and respect for property. The most important realization for students is that each and every student is responsible for the consequences of his/her behaviour. Adherence to the Ontario Code of Conduct is the responsibility of students. Additional information and guidelines are developed for the school through the cooperation of parents, students and teachers and are posted on the school website in the student handbook.

## 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 including Experiential Learning. Experiential Learning programs such as Co-op, 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.

# 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 Training, Colleges and Universities.

## 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](http://successforlife.ca)!

## 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 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 your local Ministry of Training, College and Universities (MTCU) office.

Fast track through an apprenticeship now and take advantage of Dual Credit and Specialist High Skills Major opportunities. See your Guidance Counsellor or Co-op teacher to apply. For more information, visit [successforlife.ca](http://successforlife.ca) and [oyap.com](http://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](http://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

- ⦿ Development of key Essential Skills and Work Habits required for the sector; and the use of the Ontario Skills Passport (OSP) for purposes of documentation

### **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.

For more information, visit [www.successforlife.ca](http://www.successforlife.ca)

## **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

[Select this link to view the Construction SHSM Credits Chart](#)

## **Health and Wellness**

### **High Skills Major Pathways**

Kinesiologist, child care worker, audiologist, fitness instructor, doctor, nurse, physiotherapist, youth care worker, hospital porter, and medical technician are just some of the numerous and varied occupations in the health and wellness sector.

The SHSM–Health and Wellness enables students to build a foundation of sector-focused

knowledge and skills before graduating and entering apprenticeship training, college, university, or an entry-level position in the workplace. Depending on local circumstances, this SHSM may be designed to have a particular focus – for example, on health care, fitness, or child care and family services.

[Select this link to view the Health and Wellness SHSM Credits Chart](#)

## **Avon Maitland District E-Learning Centre (AMDEC)**

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

AMDEC delivers a non-semestered, modified continuous intake program. With the permission of your home school, you may start AMDEC courses any time between September and mid-February, but all students must finish their courses by early June. You have flexible deadlines for your assignments; however, you are responsible for establishing an assignment completion 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 post-secondary mark submission deadlines). You are encouraged to complete courses prior to the final due date. Module completion requirements and a list of important due dates are posted in the Student Handbook and are also available on our website: [www.amdec.ca](http://www.amdec.ca).

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

AMDEC's course offerings are determined in the spring of each school year. A list of courses that are currently offered can be found under the Courses tab on our website: [www.amdec.ca](http://www.amdec.ca).

# What You Need to Graduate

## 18 Compulsory Credits

Students must earn the following compulsory credits to obtain the Ontario Secondary School Diploma:

### 4 English Credits (1 credit per grade)

- ⦿ Grade 9
- ⦿ Grade 10
- ⦿ Grade 11
- ⦿ Grade 12

### 3 Mathematics Credits (1 credit in grade 11 or 12)

- ⦿ Grade 9
- ⦿ Grade 10
- ⦿ Grade 11 or 12

### 2 Science Credits

- ⦿ Grade 9
- ⦿ Grade 10
- ⦿ **1 Canadian History Credit**
- ⦿ **1 Canadian Geography Credit**
- ⦿ **1 Arts Credit**
- ⦿ **1 Health & Physical Education Credit**
- ⦿ **1 French as a Second Language Credit**
- ⦿ **0.5 Career Studies Credit**
- ⦿ **0.5 Civics Credit**

### Plus one credit from each of the following groups

- ⦿ **1 Additional Credit** in English, or French as second language, or a native language, or a classical or an international language, or social sciences and the humanities, or Canadian and world studies, or guidance and career education, or cooperative education
- ⦿ **1 Additional Credit** in health & physical education, or the arts, or business studies, or French as a second language, or cooperative education
- ⦿ **1 Additional Credit** in science (grade 11 or 12), or technological education, or French as a second language, or computer studies, or cooperative education.

## In Addition, Students Must Complete:

- 12 Optional Credits
- 40 Hours of Community Services Activities
- The Provincial Literacy Requirement

## Making Your Choices for Grades 11 and 12

### Compulsory Courses

Students should review the compulsory credits required for their OSSD in order to meet diploma requirements. Since postsecondary destinations can be very specific and sometimes diverse regarding subject admission criteria, each student who intends to apply to a postsecondary institution should check the requirements for the programs in the calendars or on the website of the destination of interest. Students should also make sure they have successfully completed 40 hours of community involvement and the literacy test. The OLC4O course, in the English Department, is available for those who have not successfully completed the literacy requirement.

**All grade 11 students are encouraged to take a full course load (8 credits); grade 11 students with fewer than 16 credits are required to take a full course load.**

**All students, including grade 12 and fifth year students, must be full-time (3 or 4 classes per semester).**

### Alternate Year Courses

Some courses are not offered every year. If you wish to take one of these alternate year courses, plan wisely, making sure you have the correct prerequisites when the course is offered.

Alternate Year Courses Offered in 2017/2018	Alternate Year Courses Offered in 2018/2019 (tentative)
<b>BBI2O</b> - Introduction to Business <b>BDI3C</b> - Entrepreneurship <b>CHW3M</b> - World History Since the Fifteenth Century <b>CGR4M</b> - The Environment and Resource Management <b>CGW4U</b> - Canadian and World Issues: A Geographic Analysis <b>EMS3O</b> - Media Studies <b>ETS4U</b> - Literature <b>HHS4U</b> - Families in Canada <b>THJ2O</b> - Green Industries	<b>AWA3O</b> - Visual Arts (Crafts) <b>AMG3M</b> - Guitar <b>BAI3E</b> - Accounting Essentials <b>BTT2O</b> - Information and Communication Technology in Business <b>CGG3O</b> - Travel and Tourism <b>CHY4C/4M</b> - World History Since the Fifteenth Century <b>GLD2O</b> - Discovering the Workplace <b>EWC4U</b> - The Writer's Craft <b>SVN3M</b> - Environmental Science

# School Course Selections 2017-2018

Grade 9			
<b>ADA10</b> - Drama <b>ALC10</b> - Integrated Arts <b>AMU10</b> - Music <b>AVI10</b> - Visual Arts <b>CGC1D</b> - Issues in C	<b>ENG1D</b> - English <b>ENG1L</b> - English <b>ENG1P</b> - English <b>FSF1D</b> - Core French <b>FSF1P</b> - Core French	<b>HFN10</b> - Food and Nutrition <b>MAT1L</b> - Mathematics <b>MFM1P</b> - Foundations of Mathematics <b>MPM1D</b> - Principles of Mathematics	<b>PPL1OFE/MA</b> - Healthy Active Living Education <b>SNC1D</b> - Science <b>SNC1L</b> - Science <b>SNC1P</b> - Science <b>TIJ10</b> - Exploring Technologies
Grade 10			
<b>ADA20</b> - Drama <b>AMG20</b> - Music (guitar) <b>AMU20</b> - Music <b>AVI20</b> - Visual Arts <b>BBI20</b> - (alternating years only) Introduction to Business <b>CHC2D</b> - Canadian History Since World War I <b>CHC2L</b> - Canadian History	<b>CHC2P</b> - Canadian History Since World War I <b>CHV20</b> - Civics & Citizenship (.5 credit... take with GLC2O) <b>ENG2D</b> - English <b>ENG2L</b> - English <b>ENG2P</b> - English <b>FSF2D</b> - Core French <b>GLC2O</b> - Career Studies (.5 credit... take with CHV2O)	<b>HFN20</b> - Food and Nutrition <b>MAT2L</b> - Mathematics <b>MFM2P</b> - Foundations of Mathematics <b>MPM2D</b> - Principles of Mathematics <b>PPL2OFE/MA</b> - Healthy Active Living <b>SNC2D</b> - Science	<b>SNC2L</b> - Science <b>SNC2P</b> - Science <b>TCJ2O</b> - Construction Technology <b>TDJ2O</b> - Technological Design <b>TEJ2O</b> - Computer Technology <b>TGJ2O</b> - Communications Tech <b>THJ2O</b> - Green Industries <b>TMJ2O</b> - Manufacturing Tech <b>TTJ2O</b> - Transportation Tech <b>TXJ2O</b> - Hairstyling and Aesthetics
Grade 11			
<b>ADA3M</b> - Drama <b>AMU3M</b> - Music <b>AVI3M</b> - Visual Arts <b>AWQ3O</b> - Photography <b>BAF3M</b> - Financial Accounting Fundamentals <b>BDI3C</b> - (alternate years only) Entrepreneurship <b>CHW3M</b> - (alternate years only) World History to the End of the 15th Century <b>CLU3E</b> - Understanding Canadian Law in Everyday Life <b>CLU3M</b> - Understanding Canadian Law <b>COOP2/COOP4</b> - Cooperative Education (2 or 4 credit) <b>EMS3O</b> - Media Studies	<b>ENG3C</b> - English <b>ENG3E</b> - English <b>ENG3U</b> - English <b>FSF3U</b> - Core French <b>GPP3O</b> - Leadership and Peer Support <b>HPC3O</b> - Raising Healthy Children <b>HSP3C</b> - Intro to Anthropology, Psychology, Sociology <b>IDC3OL</b> - Interdisciplinary Studies (Healthy Living focus) <b>IDC3OT</b> - Interdisciplinary Studies (Computer/Media/Engineering focus) <b>MBF3C</b> - Foundations for College Mathematics <b>MCF3M</b> - Functions & Applications <b>MCR3U</b> - Functions	<b>NBV3E</b> - Aboriginal Beliefs, Values, and Aspirations in Contemporary Society <b>PAF3O</b> - Healthy Active Living: Personal & Fitness Activities <b>PPL3OFE/MA</b> - Healthy Active Living Education <b>SBI3C</b> - Biology <b>SBI3U</b> - Biology <b>SCH3U</b> - Chemistry <b>SPH3U</b> - Physics <b>SVN3E</b> - Environmental Science <b>TCE3E</b> - Construction Technology: Electrical/Network Cabling <b>TCJ3C</b> - Construction Technology (Female)	<b>TCJ3E</b> - Construction Technology <b>TDJ3M</b> - Technological Design <b>TEJ3M</b> - Computer Engineering Technology <b>TGJ3M</b> - Communications Technology <b>TMJ3E</b> - Manufacturing Technology <b>TMJ3M</b> - Manufacturing Engineering Technology <b>TTJ3C</b> - Transportation Technology <b>TTS3C</b> - Transportation Technology (small engines) <b>TWJ3E2</b> - Custom Woodworking (2 credit) <b>TXJ3E</b> - Hairstyling & Aesthetics
Grade 12			
<b>ADA4M</b> - Drama <b>AMU4M</b> - Music <b>AVI4M</b> - Visual Arts <b>AWQ4M</b> - Photography <b>BOH4M</b> - Business Leadership: Management Fundamentals <b>CGR4M</b> - (alternate years only) The Environment and Resource Management <b>CGW4U</b> - (alternate years only) Canadian and World Issues: A Geographic Analysis <b>COOP2/COOP4</b> - Cooperative Education (2 or 4 credit) <b>ENG4C</b> - English <b>ENG4E</b> - English <b>ENG4U</b> - English	<b>ETS4U</b> - (alternate years only) Literature <b>FSF4U</b> - Core French <b>HHS4U</b> - Families in Canada <b>IDC4UL</b> - Interdisciplinary Studies (Healthy Living focus) <b>IDC4UT</b> - Interdisciplinary Studies (Computer/Media/Engineering focus) <b>MAP4C</b> - Foundations for College Mathematics <b>MCT4C</b> - Mathematics for College Technology <b>MCV4U</b> - Calculus and Vectors <b>MDM4U</b> - Mathematics of Data Management <b>MEL4E</b> - Mathematics for Work and Everyday Life	<b>MHF4U</b> - Advanced Functions <b>NDW4M</b> - Issues of Indigenous Peoples in a Global Context <b>OLC4O</b> - Ontario Secondary School Literacy Course <b>PAF4O</b> - Healthy Active Living: Personal & Fitness Activities <b>PPL4O</b> - Healthy Active Living Education <b>PSK4U</b> - Introductory Kinesiology <b>SBI4U</b> - Biology <b>SCH4C</b> - Chemistry <b>SCH4U</b> - Chemistry <b>SNC4E</b> - Science <b>SPH4C</b> - Physics <b>SPH4U</b> - Physics <b>TCE4E</b> - Construction Technology: Electrical/Network Cabling	<b>TCJ4C</b> - Construction Technology (Female) <b>TCJ4E</b> - Construction Technology <b>TEJ4M</b> - Computer Engineering Technology <b>TGJ4M</b> - Communications Technology <b>TTMJ4E</b> - Manufacturing Technology <b>TMJ4M</b> - Manufacturing Engineering Technology <b>TTJ4C</b> - Transportation Technology <b>TTJ4E</b> - Transportation Technology: Vehicle Maintenance <b>TWJ4E2</b> - Custom Woodworking (2 credit) <b>TXJ4E</b> - Hairstyling and Aesthetics

# The Arts

## ADA10, Drama 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.

## ALC10, Integrated Arts Grade 9, Open

This course integrates two or more of the arts, giving students the opportunity to produce and present integrated art works created individually or collaboratively. Students will demonstrate innovation as they learn and apply concepts, styles, and conventions unique to the various arts and acquire skills that are transferable beyond the classroom. Students will use the creative process and responsible practices to explore solutions to integrated arts challenges.

**This course is recommended for students who do not have a long-term interest in the arts, but need to fulfill the compulsory arts credit.**

## AMU10, 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.

## AVI10, Visual Arts Grade 9, Open

This course is exploratory in nature, offering an overview of visual arts as a foundation for further study. Students will become familiar with the elements and principles of design and the expressive qualities of various materials by using a range of media, processes, techniques, and styles. Students will use the creative and critical analysis processes and will interpret art within a personal, contemporary, and historical context.

## ADA20, Drama 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.

## AMG20, Music Grade 10, Open

This course emphasizes the creation and performance of music at a level consistent with previous experience. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of reflective and analytical activities. Students will develop their understanding of musical conventions, practices, and terminology and apply the elements of music in a range of activities. They will also explore the function of music in society with reference to the self, communities, and cultures. **This is an introductory course for guitar (classical or acoustic, not electric) and will include classical as well as modern guitar styles such as blues, pop, and rock; students are responsible for providing their own instrument (classical or acoustic). This**

**course is not an alternative to AMU2O; rather, it is designed for those students who might otherwise not register for AMU2O.**

**AMU2O,  
Music  
Grade 10, Open**

This course emphasizes the creation and performance of music at a level consistent with previous experience. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of reflective and analytical activities. Students will develop their understanding of musical conventions, practices, and terminology and apply the elements of music in a range of activities. They will also explore the function of music in society with reference to the self, communities, and cultures. **This course is intended for those students who have taken AMU1O or who have extensive experience playing a wind/brass/percussion instrument, and will focus on developing the techniques of music reading, theory, and performance.**

**AVI2O,  
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.

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

This course requires students to create and perform in dramatic presentations. Students will analyse, interpret, and perform dramatic works from various cultures and time periods. Students will research various acting styles and conventions that could be used in their

presentations, and analyse the functions of playwrights, directors, actors, designers, technicians, and audiences. **Prerequisite: Drama, Grade 9 or 10, Open**

**AMU3M,  
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**

**AVI3M,  
Visual Arts  
Grade 11, University/College Preparation**

This course enables students to further develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, and printmaking, as well as the creation of collage, multimedia works, and works using emerging technologies. Students will use the critical analysis process when evaluating their own work and the work of others. The course may be delivered as a comprehensive program or through a program focused on a particular art form (e.g., photography, video, computer graphics, information design). **Prerequisite: Visual Arts, Grade 9 or 10, Open**

**AWQ3O,  
Visual Arts, Photography  
Grade 11, Open**

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. **NOTE: AWQ4M and AWQ30 can NOT be taken in the same year as the two classes will be offered at the same time.**

**This course focuses on studio activities in digital photography through practical hands-on approaches to learning. Having their own digital SLR camera is an asset.**

**ADA4M,  
Drama**

**Grade 12, University/College Preparation**

This course requires students to experiment individually and collaboratively with forms and conventions of both drama and theatre from various cultures and time periods. Students will interpret dramatic literature and other texts and media sources while learning about various theories of directing and acting. Students will examine the significance of dramatic arts in various cultures, and will analyse how the knowledge and skills developed in drama are related to their personal skills, social awareness, and goals beyond secondary school.

**Prerequisite: Drama, Grade 11, University/College Preparation**

**AMU4M,  
Music**

**Grade 12, University/College Preparation**

This course enables students to enhance their musical literacy through the creation, appreciation, analysis, and performance of music. Students will perform traditional, commercial, and art music, and will respond with insight to live and recorded performances. Students will enhance their understanding of the function of music in society and the impact of music on themselves and various communities and cultures. Students will analyse how to apply skills developed in music to their life and careers. **Prerequisite: Music, Grade 11, University/College Preparation**

**AVI4M,**

**Visual Arts**

**Grade 12, University/College Preparation**

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

**AWQ4M,**

**Visual Arts, Photography**

**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. **NOTE: AWQ4M and AWQ30 can NOT be taken in the same year as the two classes will be offered at the same time. Prerequisite: Visual Arts, Grade 11, University/College Preparation or Open, AVI3M or AWQ30**

**This course will explore a wide variety of the materials, techniques and methods for digital photography through practical hands-on approaches to learning. Having their own digital SLR camera is an asset.**

# Business Studies

## BBI2O, Introduction to Business Grade 10, Open

This course introduces students to the world of business. Students will develop an understanding of the functions of business, including accounting, marketing, information technology, human resources, and production, and of the importance of ethics and social responsibility. This course builds a foundation for further studies in business and helps students develop the business knowledge and skills they will need in their everyday lives. **This course is offered in alternate years; it is being offered in 2017-2018; but not in the 2018-2019 school year. Prerequisite: None**

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

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

## BDI3C, Entrepreneurship: The Venture Grade 11, College Preparation

This course focuses on ways in which entrepreneurs recognize opportunities, generate ideas, and organize resources to plan successful ventures that enable them to achieve their goals. Students will create a venture plan for a student-run school-based or summer business. Through hands-on experiences, students will have opportunities to develop the values, traits, and skills most often associated with successful entrepreneurs. **This course is offered in alternate years; it is being offered in 2017-2018; but not in the 2018-2019 school year. Prerequisite: None**

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

This course focuses on the development of leadership skills used in managing a successful business. Students will analyze the role of a leader in business with a focus on decision making, management of group dynamics, workplace stress and conflict, motivation of employees, and planning. Effective business communication skills, ethics, and social responsibility will be emphasized throughout the course. **Prerequisite: Any university, university/college, or college preparation course in business studies, English, or Canadian and world studies**

# Canadian and World Studies

## CGC1D, Issues in Canadian Geography Grade 9, Academic

This course examines interrelationships within and between Canada's natural and human systems and how these systems interconnect with those in other parts of the world. Students will explore environmental, economic, and social geographic issues relating to topics such as transportation options, energy choices, and urban development. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate various geographic issues and to develop possible approaches for making Canada a more sustainable place to live.

## CGC1P, Issues in Canadian Geography Grade 9, Applied

This course focuses on current geographic issues that affect Canadians. Students will draw on their personal and everyday experiences as they explore a range of issues, including food and water supplies, competing land uses, and interactions with the natural environment, developing their awareness that issues that affect their lives are interconnected with issues

in other parts of the world. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate choices related to sustainable living in Canada.

**CHC2D,**  
**Canadian History Since World War I**  
**Grade 10, Academic**

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

**CHC2L,**  
**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 practise reading, writing, visual, and oral literacy skills, and mathematical literacy skills to identify and communicate ideas in a variety of forms.

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

This course focuses on the social context of historical developments and events and how they have affected the lives of people in Canada since 1914. Students will explore interactions between various communities in Canada as well as contributions of individuals and groups to Canadian heritage and identity. Students will develop their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating the continuing relevance of historical developments and how they have helped shape communities in present-day Canada.

**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.

**This course must be selected with GLC20.**

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

This course explores the history of various societies around the world, from earliest times to around 1500 CE. Students will examine life in and the legacy of various ancient and pre-modern societies throughout the world, including those in, Africa, Asia, Europe, and the

Americas. Students will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating social, political, and economic structures and historical forces at work in various societies and in different historical eras.

**This course is offered in alternate years; it is being offered in 2017-2018; but not in the 2018-2019 school year. Prerequisite: Canadian History Since World War 1, Grade 10 Academic or Applied**

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

This course enables students to develop a practical understanding of laws that affect the everyday lives of people in Canada, including their own lives. Students will gain an understanding of the need for laws, and of their rights, freedoms, and responsibilities under Canadian law. Topics include laws relating to marriage, the workplace, cyberbullying, and criminal offences. Students will begin to develop legal reasoning skills and will apply the concepts of legal thinking and the legal studies inquiry process when investigating legal issues that are relevant to life in Canada today.

**Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied, or the locally developed compulsory course (LDCC) in Canadian history**

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

This course explores Canadian law, with a focus on legal issues that are relevant to the lives of people in Canada. Students will gain an understanding of laws relating to rights and freedoms in Canada; our legal system; and family, contract, employment, tort, and criminal law. Students will develop legal reasoning skills and will apply the concepts of legal thinking and the legal studies inquiry process when investigating a range of legal issues and formulating and communicating informed

opinions about them. **Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied**

**NBV3E,**  
**Aboriginal Beliefs, Values, and Aspirations in Contemporary Society**  
**Grade 11, Workplace Preparation**

This course focuses on the beliefs, values, and aspirations of Aboriginal peoples in Canada. Students will examine issues of identity facing Indian, Métis, and Inuit peoples, and their relationships to land and nature, as well as to one another within their communities and working environments. Students will also learn how traditional and contemporary beliefs and values influence the present-day aspirations and actions of Aboriginal peoples. **Prerequisite: Aboriginal Peoples in Canada, Grade 10, Open or Canadian History in the Twentieth Century, Grade 10, Academic or Applied**

**CGR4M,**  
**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. This course is offered in alternate years; it is being offered in 2017-2018; but not in the 2018-2019 school year. (NOTE: CGR4M and CGW4U can NOT be taken in the same year as the two classes will be offered at the same time)**

## CGW4U,

### Canadian and World Issues: A Geographic Analysis

#### Grade 12, University Preparation

This course examines the global challenges of creating a sustainable and equitable future, focusing on current issues that illustrate these challenges. Students will investigate a range of topics, including cultural, economic, and geopolitical relationships, regional disparities in the ability to meet basic human needs, and protection of the natural environment. Students will use geotechnologies and skills of geographic inquiry and analysis to develop and communicate balanced opinions about the complex issues facing Canada and a world that is interdependent and constantly changing. **Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities. This course is offered in alternate years; it is being offered in 2017-2018; but not in the 2018-2019 school year. (NOTE: CGR4M and CGW4U can NOT be taken in the same year as the two classes will be offered at the same time)**

## NDW4M,

### Issues of Indigenous Peoples in a Global Context

#### Grade 12, University/College Preparation

This course examines historical and contemporary issues of concern to Indigenous peoples from a global perspective. Students will explore the richness, depth, and diversity of Indigenous cultures, traditions and knowledge. They will consider how diverse Indigenous communities persevere despite recent global environmental and economic trends. Topics such as identity, social justice, human rights and abuses, spirituality, resistance and protest for change will be investigated. **Prerequisite: Any Grade 11 First Nations, Métis and Inuit Studies or any Grade 11 University, University/College, or College Preparation course in Canadian and world studies or any Grade 11 University, University/ College, or College Preparation course in Social Science and Humanities.**

## Cooperative Education

### COOP2, 2 Credits

#### COOP

#### Grade 11 or 12, Open

Cooperative education is a program that allows students to explore career opportunities, gain valuable work experience, strengthen employment skills, and improve qualifications for future employment/education. Students also discover personal interests/abilities, develop confidence and obtain employment references. Time is divided between regular school classes and a work placement. Coop must be tied to a related course, preferably at the grade 11 or 12 level. Students who are responsible, dependable, and can handle the independence of combining work and school should consider going through the application process, which occurs early in the new year; application forms are due Friday, February 10, 2017. Listen to the announcements or contact the coop office for more details.

### COOP4, 4 Credits

#### COOP

#### Grade 11 or 12, Open

This cooperative education program is similar to COOP2 described above but involves a full day instead of half a day. Consequently, students may work near their home with minimal traveling expenses. Since this is a four-credit program, students must have two related courses, preferably in grade 11 or 12. There are also additional assignments which must be completed.

## English

### ENG1D,

#### English

#### Grade 9, Academic

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

of forms. An important focus will be on the use of strategies that contribute to effective communication. The course is intended to prepare students for the grade 10 academic English course, which leads to university or college preparation courses in grades 11 and 12.

**ENG1L,  
English  
Grade 9, Locally Developed**

This course provides foundational literacy and communication skills to prepare students for success in their daily lives, in the workplace, and in the grade 10 LDCC Course. The course is organized into strands that develop listening and talking skills, reading and viewing skills, and writing skills. In all strands, the focus is on developing foundational literacy skills and on using language clearly and accurately in a variety of authentic contexts. Students develop strategies and put into practice the processes involved in talking, listening, reading, viewing, writing, and thinking, and reflect regularly upon their growth in these areas.

**ENG1P,  
English  
Grade 9, Applied**

This course is designed to develop the key oral communication, reading, writing, and media literacy skills students need for success in secondary school and daily life. Students will read, interpret, and create a variety of informational, literary, and graphic texts. An important focus will be on identifying and using appropriate strategies and processes to improve students' comprehension of texts and to help them communicate clearly and effectively. The course is intended to prepare students for the grade 10 applied English course, which leads to college or workplace preparation courses in grades 11 and 12.

**ENG2D,  
English  
Grade 10, Academic**

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,  
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, or in the English Grade 11 Workplace Preparation course. The course is organized by strands that extend listening and talking skills, reading and viewing skills, and writing skills. In all strands, the focus is on refining foundational literacy skills and on using language clearly and accurately in a variety of authentic contexts. Students build on their strategies and engage in the processes involved in talking, listening, reading, viewing, writing, and thinking. Students reflect regularly upon their growth in these areas. **Prerequisite: a Grade 9 English Credit**

**ENG2P,  
English  
Grade 10, Applied**

This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in secondary school and daily life. Students will study and create a variety of informational, literary, and graphic texts. An important focus will be on the consolidation of strategies and processes that help students interpret texts and communicate clearly and effectively. This course is intended to prepare students for the compulsory grade 11 college or workplace preparation course. **Prerequisite: English, Grade 9, Academic or Applied**

**EMS30,  
Media Studies  
Grade 11, Open**

This course emphasizes knowledge and skills that will enable students to understand media communication in the twenty-first century and to use media effectively and responsibly. Through analyzing the forms and messages of a variety of media works and audience responses to them, and through creating their own media works, students will develop critical thinking skills, aesthetic and ethical judgment, and skills in viewing, representing, listening, speaking, reading, and writing. **This course is offered in alternate years; it is being offered in 2017-2018; but not in the 2018-2019 school year** **Prerequisite: English, Grade 10, Academic or Applied**

**ENG3C,  
English  
Grade 11, College Preparation**

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will study the content, form, and style of a variety of informational and graphic texts, as well as literary texts from Canada and other countries, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity. The course is intended to prepare students for the compulsory grade 12 college preparation course. **Prerequisite: English, Grade 10, Applied**

**ENG3E,  
English  
Grade 11, Workplace Preparation**

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will study the content, form, and style of a variety of contemporary informational, graphic, and literary texts; and create oral, written, and media texts in a variety of forms for practical purposes. An important focus will be on using language

clearly and accurately in a variety of formal and informal contexts. The course is intended to prepare students for the compulsory grade 12 workplace preparation course. **Prerequisite: English, Grade 10, Applied or English, Grade 10, Locally Developed**

**ENG3U,  
English  
Grade 11, University Preparation**

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze challenging literary texts from various periods, countries, and cultures, as well as a range of informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on using language with precision and clarity and incorporating stylistic devices appropriately and effectively. The course is intended to prepare students for the compulsory Grade 12 university or college preparation course. **Prerequisite: English, Grade 10, Academic**

**ENG4C,  
English  
Grade 12, College Preparation**

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze a variety of informational and graphic texts, as well as literary texts from various countries and cultures, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity and developing greater control in writing. The course is intended to prepare students for college or the workplace. **Prerequisite: English, Grade 11, College Preparation**

**ENG4E,  
English  
Grade 12, Workplace Preparation**

This course emphasizes the consolidation of literacy, communication, and critical and

creative thinking skills necessary for success in the workplace and in daily life. Students will analyze informational, graphic, and literary texts and create oral, written, and media texts in a variety of forms for workplace related and practical purposes. An important focus will be on using language accurately and organizing ideas and information coherently. The course is intended to prepare students for the workplace and active citizenship. **Prerequisite: English, Grade 11, Workplace Preparation**

**ENG4U,  
English  
Grade 12, University Preparation**

This course emphasizes the consolidation of the literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. An important focus will be on using academic language coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. The course is intended to prepare students for university, college, or the workplace. **Prerequisite: English, Grade 11, University Preparation**

**ETS4U,  
Studies in Literature  
Grade 12, University Preparation**

This course is for students with a special interest in literature and literary criticism. The course may focus on themes, genres, time periods, or countries. Students will analyse a range of forms and stylistic elements of literary texts and respond personally, critically, and creatively to them. They will also assess critical interpretations, write analytical essays, and complete an independent study project. **This course is offered alternately with EWC4U; ETS4U will be offered in 2017-2018 and EWC4U will be offered in 2018-2019. Prerequisite: English, Grade 11, University Preparation**

**OLC4O,  
Ontario Secondary School Literacy Course  
Grade 12, Open**

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

## **French**

**FSF1D,  
Core French  
Grade 9, Academic**

This course provides opportunities for students to communicate and interact in French with increasing independence, with a focus on familiar topics related to their daily lives. Students will develop their skills in listening, speaking, reading, and writing by using 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 for life-long language learning. **Prerequisite: Minimum of 600 hours of French instruction, or equivalent**

**FSF1P,  
Core French  
Grade 9, Applied**

This course provides opportunities for students to communicate in French in structured situations, with a focus on everyday topics, and to apply their knowledge of French in everyday situations. Students will develop listening, speaking, reading, and writing 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 for lifelong language learning. **Prerequisite: Minimum of 600 hours of French instruction, or equivalent**

**FSF2D,  
Core French  
Grade 10, Academic**

This course provides opportunities for students to communicate in French about personally relevant, familiar, and academic topics in real-life situations with increasing independence. Students will exchange information, ideas, and opinions with others in guided and increasingly spontaneous spoken interactions. Students will continue to develop their language knowledge and skills through the selective use of strategies that contribute to effective communication. They will also increase their understanding and appreciation of diverse French-speaking communities, and will continue to develop the skills necessary to become life-long language learners. **Prerequisite: Core French, Grade 9, Academic or Applied**

**FSF3U,  
Core French  
Grade 11, University Preparation**

This course offers students extended opportunities to speak and interact in real-life situations in French with greater independence. Students will develop their listening, speaking, reading, and writing skills, as well as their creative and critical thinking skills, through responding to and exploring a variety of oral

and written texts. They will also broaden their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

**Prerequisite: Core French, Grade 10, Academic**

**FSF4U,  
Core French  
Grade 12, University Preparation**

Grade 12, University Preparation This course provides extensive opportunities for students to speak and interact in French independently. Students will develop their listening, speaking, reading, and writing skills, apply language learning strategies in a wide variety of real-life situations, and develop their creative and critical thinking skills through responding to and interacting with a variety of oral and written texts. They will also enrich their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning. **Prerequisite: Core French, Grade 11, University Preparation**

## **Guidance and Career Education**

**GLS10/GLE10,  
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.

**GLC20, (0.5 Credit)  
Career Studies  
Grade 10, Open**

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

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

**This course must be selected with CHV20**

**GPP30,**

**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 - 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. **Students must be in grade 11 or grade 12 to choose this course.**

## Health and Physical Education

**PPL10FE/PPL10MA,**

**Healthy Active Living Education**

**Grade 9, 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. **If numbers permit, this course will be taught as two gender-separate courses.**

**PPL20FE/PPL20MA,**

**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. **If numbers permit, this course will be taught as two gender-separate courses.**

**PAF30,**

**Healthy Living Education and 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. **This course may be offered in the morning before school if it cannot be scheduled during the regular school day, and will emphasize fitness training and activities. If scheduled before the school day, students must arrange their own transportation to school. Students must purchase a membership at the North Huron Recreation Complex for the duration of the class.**

**PPL30FE/PPL30MA,  
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. **If numbers permit, this will be taught as two gender-separate courses.**

**PAF4O,  
Healthy Living Education and Personal and  
Fitness Activities  
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. **This course may be offered in the morning before school if it cannot be scheduled during the regular school day, and will emphasize fitness training and activities. If scheduled before the school day, students must arrange their own transportation to school. Students must purchase a membership at the North Huron Recreation Complex for the duration of the class.**

**PPL4O,  
Healthy Active Living Education  
Grade 12, Open**

This course enables students to further develop the knowledge and skills they need to make healthy choices. It places special emphasis on how students can maintain the habits of healthy, active living 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,  
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 open course in health and physical education. A biology background is strongly recommended.**

# Interdisciplinary Studies

## **IDC3OL, Interdisciplinary Studies, Healthy Living Focus 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. **IDC3OL, IDC4OL and IDC4UL will focus on the development and implementation of a "Healthy and Active Lifestyle". Some possible topics may include food, nutrition science, fitness, environment, outdoor recreation, physical health and education or working with children. Topics outside of the focus area may be chosen with teacher permission.**

## **IDC3OT, Interdisciplinary Studies, Computer Focus 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. **IDC3OT, IDC4OT and IDC4UT will focus on computer related learning. Sample projects could include: programming, yearbook, photography, audio, video, AutoCAD, Graphic Design, Web Design, animation, etc. Recommended preparation: any computer related course. Topics outside of the focus area may be chosen with teacher permission.**

## **IDC4OL, Interdisciplinary Studies, Healthy Living Focus Grade 12, Open**

This course emphasizes the development of practical skills and knowledge to solve problems, make decisions, create personal meaning, and present findings beyond the scope of a single subject or discipline. Through individual and collaborative inquiry and research into contemporary issues, real-life situations, and careers, students will apply the principles and skills derived from the complementary subjects and disciplines studied, evaluate the reliability of information, and examine how information technology can be used safely, effectively, and legally. They will also learn how to select strategies to define problems, research alternative solutions, assess their thinking in reaching decisions, and adapt to change as they acquire new knowledge. **IDC3OL, IDC4OL and IDC4UL will focus on the development and implementation of a "Healthy and Active Lifestyle". Some possible topics may include food, nutrition science, fitness, environment, outdoor recreation, physical health and education or working with children. Topics outside of the focus area may be chosen with teacher permission.**

## **IDC4OT, Interdisciplinary Studies, Computer Focus Grade 12, Open**

This course emphasizes the development of practical skills and knowledge to solve problems, make decisions, create personal meaning, and present findings beyond the scope of a single subject or discipline. Through individual and collaborative inquiry and research into

contemporary issues, real-life situations, and careers, students will apply the principles and skills derived from the complementary subjects and disciplines studied, evaluate the reliability of information, and examine how information technology can be used safely, effectively, and legally. They will also learn how to select strategies to define problems, research alternative solutions, assess their thinking in reaching decisions, and adapt to change as they acquire new knowledge. **IDC3OT, IDC4OT and IDC4UT will focus on computer related learning.**

**Sample projects could include: programming, yearbook, photography, audio, video, AutoCAD, Graphic Design, Web Design, animation, etc.**

**Recommended preparation: any computer related course. Topics outside of the focus area may be chosen with teacher permission.**

### **IDC4UL, Interdisciplinary Studies, Healthy Living Focus Grade 12, University Preparation**

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

**IDC3OL, IDC4OL and IDC4UL will focus on the development and implementation of a “Healthy and Active Lifestyle”. Some possible topics may include food, nutrition science, fitness, environment, outdoor recreation, physical health and education or working with children. Topics outside of the focus area may be chosen with teacher permission.**

### **IDC4UT, Interdisciplinary Studies, Computer Focus Grade 12, University Preparation**

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

**IDC3OT, IDC4OT and IDC4UT will focus on computer related learning. Sample projects could include: programming, yearbook, photography, audio, video, AutoCAD, Graphic Design, Web Design, animation, etc. Recommended preparation: any computer related course. Topics outside of the focus area may be chosen with teacher permission.**

## **Mathematics**

### **MAT1L, Mathematics Grade 9, Locally Developed**

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

**MFM1P,**  
**Foundations of Mathematics**  
**Grade 9, Applied**

This course enables students to develop an understanding of mathematical concepts related to introductory algebra, proportional reasoning, and measurement and geometry through investigation, the effective use of technology, and hands-on activities. Students will investigate real-life examples to develop various representations of linear relations, and will determine the connections between the representations. They will also explore certain relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

**MPM1D,**  
**Principles of Mathematics**  
**Grade 9, Academic**

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

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

This course emphasizes the extension of mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, and in the grade 11 mathematics workplace preparation course. The course is organized in three strands related to money sense, measurement, and proportional

reasoning. In all strands, the focus is on strengthening and extending key foundational mathematical concepts and skills by solving authentic, everyday problems. Students have opportunities to extend their mathematical literacy and problem-solving skills and to continue developing their skills in reading, writing, and oral language through relevant and practical math activities. **Prerequisite: a grade 9 mathematics credit**

**MFM2P,**  
**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: Foundations of Mathematics, Grade 9, Applied or Principles of Mathematics, Grade 9, Academic**

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

This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through 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: Principles of Mathematics, Grade 9, Academic**

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

This course enables students to broaden their understanding of mathematics as a problem-solving tool in the real world. Students will extend their understanding of quadratic relations; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; develop their ability to reason by collecting, analyzing, and evaluating data involving one variable; connect probability and statistics; and solve problems in geometry and trigonometry. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. **Prerequisite: Foundations of Mathematics, Grade 10, Applied \*\* Students who have taken MFM2P and have achieved a final grade of 70% or above may wish to consider taking MCF3M in grade eleven.\*\***

### **MCF3M, Functions and Applications Grade 11, University/College Preparation**

This course introduces basic features of the function by extending students' experiences with 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 applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems. **Prerequisite: Principles of Mathematics, Grade 10, Academic, or Foundations of Mathematics, Grade 10, Applied**

### **MCR3U, Functions Grade 11, University Preparation**

This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of

discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; investigate inverse functions; and develop facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems. **Prerequisite: Principles of Mathematics, Grade 10, Academic**

### **MEL3E, Mathematics for Work and Everyday Life Grade 11, Workplace Preparation**

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will solve problems associated with earning money, paying taxes, and making purchases; apply calculations of simple and compound interest in saving, investing, and borrowing; and calculate the costs of transportation and travel in a variety of situations. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. **Prerequisite: Mathematics, Grade 9, Academic or Foundations of Mathematics, Grade 9, Applied or a Ministry-Approved Locally Developed Grade 10 Mathematics Course**

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

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyze data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; 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, or Functions and Applications, Grade 11, University / College Preparation**

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

This course enables students to extend their knowledge of functions. Students will investigate and apply properties of polynomial, exponential, and trigonometric functions; continue to represent functions numerically, graphically, and algebraically; develop facility in simplifying expressions and solving equations; and solve problems that address applications of algebra, trigonometry, vectors, and geometry. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for a variety of college technology programs.

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

**\*\*Students who wish to take MCT4C in grade 12 must have taken MCF3M or MCR3U in grade 11. Some college level programs, especially in science or technology, may have MCT4C as a prerequisite or a recommendation.\*\***

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

This course builds on students' previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors and representations of lines and planes in three-dimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, sinusoidal, exponential, rational, and radical functions; and apply these concepts and skills to the modelling of real-world relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who choose to pursue careers in fields

such as science, engineering, economics, and some areas of business, including those students who will be required to take a university-level calculus, linear algebra, or physics course.

**Prerequisite: Advanced Functions (MHF4U) must be taken prior to or concurrently with Calculus and Vectors (MCV4U)**

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

This course broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing and analyzing large amounts of information; solve problems involving probability and statistics; and carry out a culminating investigation 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, Grade 11, University Preparation or Functions and Applications, Grade 11, University/ College Preparation**

**MEL4E,  
Mathematics for Work and Everyday Life  
Grade 12, Workplace Preparation**

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will investigate questions involving the use of statistics; apply the concept of probability to solve problems involving familiar situations; investigate accommodation costs, create household budgets, and prepare a personal income tax return; 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 Preparation**

**MHF4U,**  
**Advanced Functions**  
**Grade 12, University Preparation**

This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric functions; develop techniques for combining functions; broaden their understanding of rates of change; and develop facility in applying these concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended both for students taking the Calculus and Vectors course as a prerequisite for a university program and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs.

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

## Special Notes About Math Prerequisites:

**\*\*** Students who have taken MFM2P and have achieved a final grade of 70% or above may wish to consider taking MCF3M in grade eleven. **\*\***

**\*\***Students who wish to take MCT4C in grade 12 must have taken MCF3M or MCR3U in grade 11. Some college level programs, especially in science or technology, may have MCT4C as a prerequisite or a recommendation. **\*\***

## Science

**SNC1D,**  
**Science**  
**Grade 9, Academic**

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Throughout the course, students will develop their skills in the processes of scientific investigation. Students

will acquire an understanding of scientific theories and conduct investigations related to sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of electricity.

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

This course emphasizes reinforcing and strengthening science-related knowledge and skills, including scientific inquiry, critical thinking and the relationship between science, society, and the environment, to prepare students for success in everyday life, in the workplace and in the Science Grade 11 Workplace Preparation course. Students explore a range of topics including science in daily life, properties of common materials, life sustaining processes in simple and complex organisms, and electrical circuits. Students have the opportunity to extend mathematical and scientific process skills and to continue developing their skills in reading, writing, and oral language through relevant and practical science activities.

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

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to apply their knowledge of science to everyday situations. They are also given opportunities to develop practical skills related to scientific investigation. Students will plan and conduct investigations into practical problems and issues related to the impact of human activity on ecosystems; the structure and properties of elements and compounds; space exploration and the components of the universe; and static and current electricity.

**SNC2D,  
Science  
Grade 10, Academic**

This course enables students to enhance their understanding of concepts in biology, chemistry, earth and space science, and physics, and of the interrelationships between science, technology, society, and the environment. Students are also given opportunities to further develop their scientific investigation skills. Students will plan and conduct investigations and develop their understanding of scientific theories related to the connections between cells and systems in animals and plants; chemical reactions, with a particular focus on acid-base reactions; forces that affect climate and climate change; and the interaction of light and matter. **Prerequisite: Science, Grade 9, Academic or Applied**

**SNC2L,  
Science  
Grade 10, Locally Developed**

This course emphasizes reinforcing and strengthening science-related knowledge and skills, including scientific inquiry, critical thinking, and the environmental impact of science and technology, to prepare students for success in everyday life, in the workplace and in the Science Grade 11 Workplace Preparation course. Students explore a range of topics including science in the media, interactions of common materials, interdependence of organisms in communities, and using electrical energy. Students have the opportunity to extend mathematical and scientific process skills and to continue developing their skills in reading, writing, and oral language through relevant and practical science activities. **Prerequisite: A Grade Nine Course in Science**

**SNC2P,  
Science  
Grade 10, Applied**

This course enables students to develop a deeper understanding of concepts in biology, chemistry, earth and space science, and physics, and to apply their knowledge of science in real-world situations.

Students are given opportunities to develop further practical skills in scientific investigation. Students will plan and conduct investigations into everyday problems and issues related to human cells and body systems; chemical reactions; factors affecting climate change; and the interaction of light and matter. **Prerequisite: Science, Grade 9, Academic or Applied**

**THJ2O,  
Green Industries  
Grade 10, Open**

This course introduces students to the various sectors of the green industries - agriculture, forestry, horticulture, floristry, and landscaping. Using materials, processes, and techniques commonly employed in these industries, students will participate in a number of hands on projects that may include plant or animal propagation; production, maintenance, and harvesting activities; the development of floral or landscaping designs; and/or related construction activities. Students will also develop an awareness of environmental and societal issues related to green industry activities, learn about safe and healthy working practices, and explore secondary and postsecondary education and training pathways and career opportunities in the various industry sectors. **This course is offered alternately with SVN3M; THJ2O will be offered in 2017-2018 and SVN3M will be offered in 2018-2019. Prerequisite: None**

**SBI3C,  
Biology  
Grade 10, 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,  
Biology  
Grade 11, University Preparation**

This course furthers students' understanding of the processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biodiversity; evolution; genetic processes; the structure and function of animals; and the anatomy, growth, and function of plants. The course focuses on the theoretical aspects of the topics under study, and helps students refine skills related to scientific investigation. **Prerequisite: Science, Grade 10, Academic**

**SCH3U,  
Chemistry  
Grade 11, University Preparation**

This course enables students to deepen their understanding of chemistry through the study of the properties of chemicals and chemical bonds; chemical reactions and quantitative relationships in those reactions; solutions and solubility; and atmospheric chemistry and the behaviour of gases. Students will further develop their analytical skills and investigate the qualitative and quantitative properties of matter, as well as the impact of some common chemical reactions on society and the environment. **Prerequisite: Science, Grade 10, Academic**

**SPH3U,  
Physics  
Grade 11, University Preparation**

This course develops students' understanding of the basic concepts of physics. Students will explore kinematics, with an emphasis on linear motion; different kinds of forces; energy transformations; the properties of mechanical waves and sound; and electricity and magnetism. They will enhance their scientific investigation skills as they test laws of physics. In addition, they will analyse the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment. **Prerequisite: Science, Grade 10, Academic**

**SVN3E,  
Environmental Science  
Grade 11, Workplace Preparation**

This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in work and life after secondary school. Students will explore a range of topics, including the impact of human activities on the environment; human health and the environment; energy conservation; resource science and management; and safety and environmental responsibility in the workplace. Emphasis is placed on relevant, practical applications and current topics in environmental science, with attention to the refinement of students' literacy and mathematical literacy skills as well as the development of their scientific and environmental literacy. **Prerequisite: Science, Grade 9, Academic or Applied, or Grade 9 or 10 Locally Developed Compulsory Credit (LDCC) in Science**

**SBI4U,  
Biology  
Grade 12, University Preparation**

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

**SCH4C,  
Chemistry  
Grade 12, College Preparation**

This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment. Students will use

a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment. **Prerequisite: Science, Grade 10, Academic or Applied**

**SCH4U,  
Chemistry**

**Grade 12, University Preparation**

This course enables students to deepen their understanding of chemistry through the study of organic chemistry, the structure and properties of matter, energy changes and rates of reaction, equilibrium in chemical systems, and electrochemistry. Students will further develop their problem-solving and investigation skills as they investigate chemical processes, and will refine their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in everyday life and on evaluating the impact of chemical technology on the environment. **Prerequisite: Chemistry, Grade 11, University Preparation**

**SNC4E,  
Science,**

**Grade 12, Workplace Preparation**

This course provides students with fundamental science knowledge and workplace skills needed to prepare them for success beyond secondary school. Students will explore hazards in the workplace, chemicals in consumer products, disease and its prevention, electricity at home and at work, and nutritional science. Emphasis is placed on current topics in science and relevant, practical activities that develop students' literacy and mathematical literacy skills and enhance their scientific literacy. **Prerequisite: Science, Grade 10 Applied or a Grade 10 Locally Developed Compulsory Credit (LDCC) in Science**

**SPH4C,  
Physics**

**Grade 12, College Preparation**

This course develops students' understanding

of the basic concepts of physics. Students will explore these concepts with respect to motion; mechanical, electrical, electromagnetic, energy transformation, hydraulic, and pneumatic systems; and the operation of commonly used tools and machines. They will develop their scientific investigation skills as they test laws of physics and solve both assigned problems and those emerging from their investigations. Students will also consider the impact of technological applications of physics on society and the environment. **Prerequisite: Science, Grade 10, Academic or Applied**

**SPH4U,  
Physics**

**Grade 12, University Preparation**

This course enables students to deepen their understanding of physics concepts and theories. Students will continue their exploration of energy transformations and the forces that affect motion, and will investigate electrical, gravitational, and magnetic fields and electromagnetic radiation. Students will also explore the wave nature of light, quantum mechanics, and special relativity. They will further develop their scientific investigation skills, learning, for example, how to analyse, 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 Sciences and Humanities**

**HFN10,  
Food and Nutrition  
Grade 9, Open**

This course focuses on guidelines for making nutritious food choices. Students will investigate factors that influence food choices, including beliefs, attitudes, current trends, traditional eating patterns, food marketing strategies, and individual needs. Students will also explore the environmental impact of a variety of food

choices at the local and global level. The course provides students with opportunities to develop food preparation skills and introduces them to the use of social science research methods in the area of food and nutrition. **This is the same course as HFN2O. Students cannot take both classes for credit.**

**HFN2O,**  
**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. **Students who have already taken HFN1O cannot take this class, since it is the same course.**

**HPC3O,**  
**Raising Healthy Children**  
**Grade 11, Open**

This course focuses on the skills and knowledge parents, guardians, and caregivers need, with particular emphasis on maternal health, pregnancy, birth, and the early years of human development (birth to six years old). Through study and practical experience, students will learn how to meet the developmental needs of young children, communicate with them, and effectively guide their early behaviour. Students will develop their research skills through investigations related to caregiving and child rearing.

**HSP3C,**  
**Introduction to Anthropology, Psychology and Sociology**  
**Grade 11, College Preparation**

This course introduces students to theories, questions, and issues related to anthropology, psychology, and sociology. Students learn

about approaches and research methods used by social scientists. 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.

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

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. **This course is offered in alternate years; it is being offered in 2017-2018; but not in the 2018-2019 school year. Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies.**

## **Technological Studies**

**TIJ1O,**  
**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.

**This is a multi-shop rotation, which could include communication, construction, manufacturing, design, computer engineering and automotive transportation technologies.**

**TCJ20,  
Construction Technology,  
Grade 10, Open**

This course requires students to design, build, and evaluate projects using design instruments and machine and hand tools. Students will solve technological problems through a variety of media; identify and describe building materials and other resources needed to construct, maintain, and service buildings; identify support systems and components; apply safety rules related to materials, processes, and equipment; identify common architectural styles; and identify careers related to construction technology.

**TDJ20,  
Technological Design  
Grade 10, Open**

This course requires students to design and develop innovative products and services. Students will learn the following: how to identify user needs related to specified design problems; the physical properties of selected materials and their application in product design; techniques to create physical products and services; various presentation techniques; how to test and evaluate design solutions; and the implications of technology on the development of products or services. Students will also become aware of design-related careers. This course will cover manual drafting, architecture, and CAD software.

**TEJ20,  
Computer Technology  
Grade 10, Open**

This course introduces students to computer systems, networking, and interfacing, as well as electronics and robotics. Students will assemble, repair, and configure computers

with various types of operating systems and application software. Students will build small electronic circuits and write computer programs to control simple peripheral devices or robots. Students will also develop an awareness of environmental and societal issues related to the use of computers, and learn about secondary and postsecondary pathways to careers in computer technology.

**TGJ20,  
Communications Technology  
Grade 10, Open**

This course introduces students to communications technology from a media perspective. Students will work in the areas of TV/video and movie production, radio and audio production, print and graphic communications, photography, and animation. Student projects may include computer-based activities such as creating videos, editing photos, working with audio, cartooning, developing animations, and designing web pages. Students will also develop an awareness of environmental and societal issues related to communications technology and explore secondary and postsecondary education and training pathways and career opportunities in the various communications technology fields.

**THJ20,  
Green Industries  
Grade 10, Open**

This course introduces students to the various sectors of the green industries - agriculture, forestry, horticulture, floristry, and landscaping. Using materials, processes, and techniques commonly employed in these industries, students will participate in a number of hands on projects that may include plant or animal propagation; production, maintenance, and harvesting activities; the development of floral or landscaping designs; and/or related construction activities. Students will also develop an awareness of environmental and societal issues related to green industry activities, learn about safe and healthy working practices, and explore secondary and

postsecondary education and training pathways and career opportunities in the various industry sectors. **This course is offered alternately with SVN3M; THJ2O will be offered in 2017-2018 and SVN3M will be offered in 2018-2019.**  
**Prerequisite: None**

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

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

**TTJ2O,**  
**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,**  
**Hairstyling and Aesthetics**  
**Grade 10, Open**

This course presents hairstyling, make-up, and nail care techniques from a salon/spa

perspective. Using materials, processes, and techniques used in the industry, students learn fundamental skills in hairstyling, giving manicures and facials, and providing hair/scalp analyses and treatments. Students will also consider related environmental and societal issues, and will explore secondary and postsecondary pathways leading to careers in the field of hairstyling and aesthetics.

**TCE3E,**  
**Construction Technology:**  
**Electrical/Network Cabling**  
**Grade 11, Workplace Preparation**

This course has an emphasis on electrical wiring in residential homes. 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. Students will also develop an awareness of environmental and societal issues related to construction technology, and explore postsecondary and career opportunities in the field. **Recommended preparation: Construction Technology, Grade 10, Open**

**TCJ3C,**  
**Construction Engineering**  
**Technology (Female)**  
**Grade 11, College Preparation**

This course enables female 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.

## **TCJ3E,**

### **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 will explore postsecondary and career opportunities in the field. **Recommended preparation: Construction Technology, Grade 10, Open**

## **TDJ3M,**

### **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. **Recommended preparation: Technological Design, Grade 10, Open.**

## **TEJ3M,**

### **Computer Engineering Technology**

#### **Grade 11, University/College Preparation**

This course examines computer systems and control of external devices. Students will assemble computers and small networks by installing and configuring appropriate hardware and software. Students will develop knowledge and skills in electronics, robotics, programming,

and networks, and will build systems that use computer programs and interfaces to control and/or respond to external devices. Students will develop an awareness of environmental and societal issues related to the use of computers, and will learn about college and university programs leading to careers in computer engineering. **Recommended preparation: Computer Technology, Grade 10, Open**

## **TGJ3M,**

### **Communications Technology**

#### **Grade 11, University/College Preparation**

This course examines communications technology from a media perspective. Students will develop knowledge and skills as they design and produce media projects in the areas of live, recorded, and graphic communications. These areas may include TV, video, and movie production; radio and audio production; print and graphic communications; photography; digital imaging; broadcast journalism; and interactive new media. Students will also develop an awareness of related environmental and societal issues and explore college and university programs and career opportunities in the various communications technology fields. **Recommended preparation: Communications Technology, Grade 10, Open**

## **TMJ3E,**

### **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.

**TMJ3M,  
Manufacturing Engineering Technology  
Grade 11, University/College Preparation**

This course enables students to develop knowledge and skills related to design, process planning, control systems, and quality assurance. Students will use a broad range of tools and equipment and will combine modern manufacturing techniques and processes with computer-aided manufacturing as they develop critical decision-making, problem-solving, and project-management skills. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about pathways leading to careers in the industry. **Recommended preparation: Manufacturing Technology, Grade 10, Open**

**TTJ3C,  
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. **Recommended preparation: Transportation Technology, Grade 10, Open**

**TTS3C,  
Transportation Technology:  
Small Engines and Recreational Equipment  
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. **Recommended preparation: Transportation Technology, Grade 10, Open**

**This is a course with an emphasis on small engine powered equipment and vehicles.**

**TWJ3E2, 2 credits  
Custom Woodworking  
Grade 11, Workplace Preparation**

This 2 credit course enables students to develop knowledge and skills related to cabinet making and furniture making. Students will gain practical experience using a variety of the materials, tools, equipment, and joinery techniques associated with custom woodworking. Students will learn to create and interpret technical drawings and will plan, design, and fabricate projects. They will also develop an awareness of environmental and societal issues related to the woodworking industry, and explore apprenticeships, postsecondary training, and career opportunities in the field that may be pursued directly after graduation. **Certain classes of this course may be partially team-taught with a college instructor. If so, upon successful completion of the college portion of the secondary course, the student will be eligible to receive a college credit (pending approval).**

**This course may be used to meet the requirements of the Construction High Skills Major.**

**TXJ3E,  
Hairstyling and Aesthetics  
Grade 11, Workplace Preparation**

This course enables students to develop knowledge and skills in cosmetology and offers a variety of applications that will equip students to provide services for a diverse clientele. Students will identify trends in the hairstyling and aesthetics industry, learn about related health and safety laws, and expand their communication and interpersonal skills through interactions with

peers and clients. Students will also consider environmental and societal issues related to the industry, and will acquire a more detailed knowledge of apprenticeships and direct-entry work positions. **Recommended preparation: Hairstyling and Aesthetics, Grade 10, Open**

**TCE4E,**

**Construction Technology:  
Electrical/Network Cabling  
Grade 12, Workplace Preparation**

This course enables students to further develop technical knowledge and skills related to residential electrical construction and to explore light commercial electrical construction. Students will continue to gain hands-on experience using a variety of materials, processes, tools, and equipment; create and interpret electrical drawings; and learn more about electrical 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 electrical construction. Students will also expand their awareness of environmental and societal issues related to electrical technology, and will explore entrepreneurship and career opportunities in the industry that may be pursued directly after graduation **Prerequisite: Construction Technology: Electrical/Network Cabling, Grade 11, Workplace Preparation**

**TCJ4C,**

**Construction Engineering  
Technology (Female)  
Grade 12, College Preparation**

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

standards and practices. Students will also focus on environmental and societal issues related to construction engineering technology, and will explore career opportunities in the field. **Prerequisite: Construction Engineering Technology, Grade 11, College Preparation**

**TCJ4E,**

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

**TEJ4M,**

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

This course extends students' understanding of computer systems and computer interfacing with external devices. Students will assemble computer systems by installing and configuring appropriate hardware and software, and will learn more about fundamental concepts of electronics, robotics, programming, and networks. Students will examine environmental and societal issues related to the use of computers, and explore postsecondary pathways leading to careers in computer engineering and related fields. **Prerequisite: Computer Engineering Technology, Grade 11, University/College Preparation.**

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

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

**Prerequisite: Communications Technology, Grade 11, University/College Preparation**

**TMJ4E,**  
**Manufacturing Technology**  
**Grade 12, Workplace Preparation**

This project-driven, hands-on course builds on students' experiences in manufacturing technology. Students will further develop knowledge and skills related to the use of engine lathes, milling machines, welding machines, and other related tools and equipment as they design and fabricate solutions to a variety of technological challenges in manufacturing. Students may have opportunities to acquire industry-standard training and certification. Students will expand their awareness of environmental and societal issues and of career opportunities in the manufacturing industry. **Prerequisite: Manufacturing Technology, Grade 11, Workplace Preparation**

**TMJ4M,**  
**Manufacturing Engineering Technology**  
**Grade 12, University/College Preparation**

This course enables students to further develop knowledge and skills related to design, process planning, control systems, project management, quality assurance, and business operations. Students will use a broad range of tools and equipment, enhance their skills in computer-

aided design, and collaborate in managing a project. Students will critically analyse and solve complex problems involved in manufacturing products. Students will expand their awareness of environmental and societal issues and of career opportunities in the manufacturing industry. **Certain classes of this course may be partially team-taught with a college instructor. If so, upon successful completion of the college portion of the secondary course, the student will be eligible to receive a college credit (pending approval). Prerequisite: Manufacturing Engineering Technology, Grade 11, University/College Preparation**

**TTJ4C,**  
**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, Grade 11, College Preparation**

**TTJ4E,**  
**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. **Recommended Preparation: Transportation Technology, Grade 11**

**TWJ4E2, 2 credits**

**Custom Woodworking**

**Grade 12, Workplace Preparation**

This 2 credit course enables students to further develop knowledge and skills related to the planning, design, and construction of cabinets and furniture for residential and/or commercial projects. Students will gain further experience in the safe use of common woodworking materials, tools, equipment, finishes, and hardware, and will learn about the entrepreneurial skills needed to establish and operate a custom woodworking business. Students will also expand their awareness of health and safety issues and environmental and societal issues related to woodworking, and will explore career opportunities that may be pursued directly after graduation. **Certain classes of this course may be partially team-taught with a college instructor. If so, upon successful completion of the college portion of the secondary course, the student will be eligible to receive a college credit (pending approval). Prerequisite: Custom Woodworking, Grade 11, Workplace Preparation (or Construction Technology, Grade 11, Workplace Preparation).**

**This course may be used to meet the requirements of the Construction High Skills Major.**

**TXJ4E,**

**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 will strengthen their fundamental cosmetology skills and develop an understanding of common business practices and strategies in the salon/spa industry. Students will also expand their understanding of environmental and societal issues and their knowledge of postsecondary

destinations in the hairstyling and aesthetics industry. **Prerequisite: Hairstyling and Aesthetics, Grade 11, Workplace Preparation**

# Apprenticeship Pathway

Jared VanCamp



"It's ok to change your mind" says Jared Van Camp. Pathway planning has been an interesting journey for Jared. "I started out thinking I was going to be a programmer, coding computer games, but after taking a few tech courses I discovered the process did not interest me. I was actually more interested in the end product - I liked playing the games a lot more than coding. I then thought I wanted to be Drama teacher because I really enjoyed Drama but then found that I was not at all interested in teaching".

Jared thought he would try the Culinary Arts dual credit course because, even if he did not go in that direction, he would gain some valuable cooking skills. The dual credit experience has had a major impact on Jared. "It was a bit of a leap for me because it was a new situation with new people and I tend to be a bit of a shy person". "Once I got into it, however, it was a great experience and I was made to feel part of a team, we were always successful together". Jared recalls a situation where the class had to cook for people from several different school boards. "I felt it was a taste of the real chef experience, being part of a real restaurant team." The experience was a real confidence boost for Jared and assured him that this was the direction he wanted to go. Jared is now looking at several college programs in the culinary arts some of which allow him to begin the apprenticeship process required for his certificate of qualification.

The culinary arts offer a lot of creativity and freedom; two important themes for Jared. "I like courses that allow a lot of freedom. I don't like being told 'this is what you are doing'. I prefer 'here is the broad idea, what is your take on it?'. Jared feels this could be why math has always been a struggle – it just doesn't allow for much creativity or freedom. "I'm a student who needs to be interested. If I lose interest then I tend to fall short on my work ethic for that subject. If I'm not interested it is hard to get my brain to absorb what is taught – I will try to find ways to connect it to my interests".

In closing Jared had this to say about highschool: "No matter how sure you are on something, highschool is a time in life where you will change your mind and then you will change your mind again and then you will be lost. That's ok to be lost. It's not something to be entirely worried about. Going into highschool I never imagined I would not go into programming or that I would want to become a teacher or that I would randomly take a chef course and then wind up wanting to be a chef."

## College Pathway

### Brayden Carter



Looking back on his four years at Madill, Brayden has realized a few things about himself and about the people around him.

A younger version of himself was not a very dedicated student. In fact before he entered high school he was less than an ideal student. Many things at Madill resulted in a change in his attitude about school. Good friends with shared interests, good teachers that connected with Brayden and instilled a desire to do well and his own determination to succeed after high school are just a few of these things. As Brayden grew up, he started to realize that hard work really did pay off. The better

student he became, the better his marks tended to be. He also learned that good marks were going to be his key to future success. He learned that good marks can translate into a successful life after school by getting him into a good college program.

Although Brayden worked very hard at being a good student, things outside of school were not always ideal. He spent a period of time on his own tending to the very real responsibilities of the cost of living on his own. Brayden was faced with having to work to pay his bills and still try to dedicate enough time to his education to do well. However difficult this time was for him, looking back it really allowed him to realize what was important to him and how his decisions/actions can contribute to his future. What Brayden takes away from this experience is the knowledge that sometimes you have to admit you are wrong and go back to the people that really do care and support you.

In his final year at Madill, Brayden's strong work ethic is paying off. He has good marks and is now planning to apply to college for Business and Entrepreneurship so that he can one day follow his dream of owning his own business.