

## CENTRE WELLINGTON DISTRICT HIGH SCHOOL <br> COURSE SELECTION HANDBOOK 2016-2017

## TABLE OF CONTENTS

ONTARIO SECONDARY SCHOOL DIPLOMA (OSSD) REQUIREMENTS ..... 2
SPECIAL EDUCATION ..... 5
EXPERIENTIAL LEARNING ..... 6
SPECIALIST HIGH SKILLS MAJOR (SHSM) 6COOPERATIVE EDUCATION6
ONTARIO YOUTH APPRENTICESHIP PROGRAM (OYAP) ..... 6
DUAL CREDIT ..... 7
BOARD PROGRAMS ..... 8
COMMUNITY ENVIRONMENTAL LEADERSHIP PROGRAM (CELP) ..... 8
DA VINCI ARTS \& SCIENCE ENVIRONMENTAL LEADERSHIP PROGRAM ..... 8
HEADWATERS: A JOURNEY TO THE SOURCE ..... 8
URBAN ARTS: MADE IN GUELPH ..... 9
NIGHT SCHOOL ..... 9
SUMMER SCHOOL ..... 9
THE ARTS ..... 10
DANCE (Martial Arts) ..... 11
DRAMA ..... 12
MEDIA ARTS ..... 14
MUSIC ..... 15
VISUAL ART ..... 17
BUSINESS, CAREERS \& ECONOMIC STUDIES ..... 19
CAREER STUDIES ..... 20
ECONOMICS ..... 20
BUSINESS ..... 21
CANADIAN \& WORLD STUDIES/SOCIAL SCIENCES \& HUMANITIES/NATIVE STUDIES ..... 24
GEOGRAPHY ..... 26
HISTORY ..... 28
LAW ..... 30
CIVICS ..... 31
POLITICS ..... 31
FAMILY STUDIES ..... 32
GENERAL SOCIAL SCIENCES ..... 34
PHILOSOPHY ..... 35
RELIGION ..... 35
NATIVE STUDIES ..... 36
CO-OPERATIVE EDUCATION ..... 37
ENGLISH ..... 38
FRENCH \& INTERNATIONAL LANGUAGES ..... 42
CORE FRENCH ..... 43
IMMERSION FRENCH ..... 45
INTERNATIONAL LANGUAGES ..... 49
HEALTH \& PHYSICAL EDUCATION ..... 50
MATHEMATICS \& COMPUTER SCIENCE ..... 54
MATHEMATICS ..... 54
COMPUTER STUDIES ..... 58
SCIENCE ..... 59
TECHNOLOGICAL EDUCATION ..... 65
INTEGRATED TECHNOLOGY ..... 68
COMPUTER TECHNOLOGY ..... 69
CONSTRUCTION ..... 70
HOSPITALITY ..... 72
MANUFACTURING ..... 73
TECHNOLOGY DESIGN ..... 75
TRANSPORTATION ..... 77

## ONTARIO SECONDARY SCHOOL DIPLOMA (OSSD) REQUIREMENTS

## Diploma Courses

Successful completion of 30 credits (18 Compulsory and 12 Optional credits) plus the additional requirements are required to earn a graduation diploma.

A credit is granted to a student who has successfully completed a course for which a minimum of 110 hours has been scheduled. The Diploma is issued by the Ontario Ministry of Education and states that a student has completed, successfully, the minimum requirements for the Ontario Secondary School Diploma (OSSD).

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

- 4 credits in English (1 credit per grade)
- 3 credits in Mathematics (1 credit in Grade 11 or 12)
- 2 credits in Science
- 1 credit in Canadian History
- 1 credit in Canadian Geography
- 1 credit in the Arts
- 1 credit in Health and Physical Education
- 1 credit in French as a Second Language
- 0.5 credit in Career Studies
- 0.5 credit in Civics

Plus one credit from each of the following groups:

## Group 1:

- English or French as a Second Language
- a Native language
- a Classical or an International Language
- Social Sciences and the Humanities
- Canadian and World Studies
- Guidance and Career Education
- Co-operative Education


## Group 2:

- Health and Physical Education
- the Arts
- Business Studies
- French as a Second Language
- Co-operative Education


## Group 3:

- Science (Grade 11 or 12)
- Technological Education
- French as a Second Language
- Computer Studies
- Co-operative Education

In addition to the compulsory credits, students must complete:

- 12 optional credits
- 40 hours of community involvement activities
- the provincial literacy requirement


## Substitutions for a Compulsory Course

The decision to make a substitution for a student should be made only if the student's educational interests are best served by such a substitution. The principal will determine whether or not a substitution should be made.

## Additional Requirements include:

- Completion of 40 hours of community involvement activities; and
- Successful completion of the Ontario Secondary School Literacy requirement.


## Community Involvement Activities

Every student must complete a minimum of 40 hours of community involvement activities as part of the requirements for an Ontario Secondary School Diploma.

## The Ontario Secondary School Literacy Requirement

All students must complete, successfully, the Grade 10 OSSLT (Ontario Secondary School Literacy Test) or the Grade 12 OSSLC (Ontario Secondary School Literacy Course), if unsuccessful with the OSSLT. Students will normally take the literacy test in the Grade 10 year (2nd year of secondary school). The literacy course provides an opportunity for students who are unsuccessful on the literacy test to meet the literacy diploma requirements. Students may not enroll in the literacy course until they have written the test at least once and been unsuccessful. Both the test and course are based on the Ontario Curriculum expectations for language and communication, particularly reading and writing, up to and including Grade 9.

## COURSE CODES

The courses are identified by a course code which consists of 5 characters. Course codes appear before the course title. The first character represents the subject group. For example:
A Arts, B Business Studies, C Canadian and World Studies.

The next two characters indicate the specific course:
e.g. AMI Music-Instrumental

BBI Introduction to Business
CGC Canadian Geography
The fourth character refers to the grade of the course:
1 Grade 9
2 Grade 10
3 Grade 11
4 Grade 12
The fifth character refers to the course
P-Applied; D-Academic; L-Essential
O-Open
C-College; U-University; E-Workplace
M-University/College
e.g. ENG 1 D

English Grade 9 Academic

## TYPES OF COURSES

Grade 9 and 10 courses are streamed into Academic (D), Applied (P), Essential (L), and Open (O).

In an Academic course, the student will learn the essential concepts of a subject and explore related material as well. Emphasis will be on theory and abstract thinking as a base for future learning and problem solving.

In an Applied course, the student will learn the essential concepts of a subject. Knowledge and skills will be developed through both theory and practical applications, but the focus will be on practical applications.

Essential Courses are designed locally to meet the unique needs of some students who may need specialized supports.

Courses that are not specific to any postsecondary destination and are appropriate for all students, which students may take to meet compulsory or optional requirements and/or for personal growth and interest are labeled Open.

Grade 11 and 12 Courses are streamed into destination courses:
College Preparation (C)
Open (O)
University / College Preparation (M)
University Preparation (U)
Workplace Preparation (E)
College Preparation Courses (C)
College preparation courses are designed to equip students with the knowledge and skills they need to meet the entrance requirements for college programs.

## Open Courses (O)

Open courses are not specific to any postsecondary destination and are appropriate for everyone. Students may take open courses to meet compulsory or optional requirements and/or for personal growth and interest.

University / College Preparation Courses (M) University / College preparation courses include content that is relevant for both university and college programs. They are designed to equip the students with the knowledge and skills needed to meet the entrance requirements for specific university and college programs.

University Preparation Courses (U)
University preparation courses are designed to equip students with the knowledge and skills they need to meet the entrance requirements for university programs.

## Workplace Preparation Courses (E)

Workplace preparation courses are designed to equip students with the knowledge and skills they need for direct entry into the workplace or for admission to apprenticeship programs offered in the community.

## COURSE PREREQUISITES

Some courses extend or build upon knowledge and skills developed in other courses. The Ministry of Education designates the courses for which prerequisites are required.

## *Course Changes

When choosing courses, students in grades nine through eleven must take 8 courses.
Once a student chooses a course, they are expected to remain enrolled in that course, unless there are special circumstances. Students are encouraged to speak to their teachers and counsellors, should any difficulties and/or challenges arise.

## STUDENT SERVICES AND COURSE SELECTION

The dedicated Student Services team offers help, pathways advice, career counseling, scholarship and SHSM guidance and support to all pupils within the CWDHS community. Students, in consultation with their parents/guardians and teachers, are responsible for their course selection using the My Blueprint icon found on the opening page of student's "ugcloud" account.

## LEARNING TO 18: STUDENT SUCCESS

 PROGRAMSEach secondary school provides a variety of programs, intervention strategies, and resources to assist students who need academic assistance. Examples are: credit recovery opportunities, independent courses, student success teacher support, and grade 8 to 9 transition programs.

## SPECIAL EDUCATION

## RESOURCE

The Special Education department provides programs and services to meet the needs of identified students throughout their time at Centre Wellington District High School. Grade 9 and 10 programs are designed to assist students to make a successful transition from Grade 8 into high school. Ongoing communication between the Special Education staff, classroom teachers, students and parents is stressed.

## REGULAR PLACEMENT OPTIONS Monitor Program

For students who need a minimum of support. Assistance is on an as-needs basis with some classroom and/or examination accommodations.

## Learning Strategies: Skills for Success in Secondary School (GLE1O, GLS1O)

These courses explore learning strategies and help students become better, more independent learners while increasing their personal management skills, both in school and in other contexts. Students will learn how to develop and apply a range of strategies to improve their learning and achievement, particularly their literacy, numeracy, communication, and planning skills. These courses will increase students' confidence, motivation, and ability to learn. *Enrollment is through consultation with Special Education and Student Success teachers.

## Gifted Students

Students, who are identified as Gifted, are placed in regular programs. The Special Education department is responsible for monitoring students' progress and assisting them to become autonomous learners. Special Education teachers will assist with appropriate course selections and encourage teachers to deliver challenging and enriching programs.

Resource Period (FTERSW) - Grades 9-12
This is designed for students who would benefit from a reduced course load. Students do not achieve a credit, but receive assistance with other courses while in the resource room.

For further information regarding course placement, please see Mr. Kellum, the Head of Special Education.

## SPECIAL EDUCATION ADVISORY COMMITTEE (SEAC)

The Upper Grand District School Board's Special Education Advisory Committee (SEAC) is a committee created under the Education Act to make recommendations to the board about matters affecting the establishment and development of special education programs and services for exceptional pupils in the board. The SEAC is made up of parents, trustees, and community representatives who meet regularly to discuss concerns about the education of exceptional children.

Parents are able to read the Special Education Plan at the school, or access the document on the Upper Grand District School Board website: http://www.ugdsb.on.ca/program/article.aspx?id= 1074

## EXPERIENTIAL LEARNING

These programs are designed to prepare students for work and to introduce them to specific career areas. Students interested in any of these programs should contact Student Services for additional information.

## SPECIALIST HIGH SKILLS MAJOR (SHSM)

Specialist High Skills Major (SHSM) is a Ministryapproved specialized program that allows students to focus their learning on a specific employment sector while meeting the requirements of the Ontario Secondary School Diploma (OSSD) and assists in their transition from secondary school to apprenticeship training, college, university, or the workplace.

Visit the SHSM website:

## http://www.ugdsb.on.ca/schooltocareer/shsm/

CWDHS has 10 SHSM pathways:

- Agriculture
- Arts \& Culture
- Business
- Construction
- Environment
- Manufacturing
- Health \& Wellness
- Hospitality
- Sports \& Recreation
- Transportation

Each SHSM must include the following five components:

- 8-10 Grade 11 and Grade 12 credits.
- Sector recognized certifications and/or training
- Experiential learning and career exploration activities with the sector.
- "Reach ahead" experiences connected with the student's chosen post-secondary pathway.
- Development of Essential Skills and work habits required in the sector from the Ontario Skills Passport.


## COOPERATIVE EDUCATION

Co-operative Education is a Ministry-approved program that allows students to earn secondary school credits while completing a work placement. The program consists of a Co-op course monitored by a Co-operative education teacher, a related curriculum course in any subject, and a work placement.

Co-op programs are for secondary students who are heading to an apprenticeship, college, university or the workplace.

Visit the Co-op website:

## http://www.ugdsb.on.ca/schooltocareer/coop/

## ONTARIO YOUTH APPRENTICESHIP PROGRAM (OYAP)

The Ontario Youth Apprenticeship Program (OYAP) is a School to Work program that opens the door for students to explore and work in apprenticeship occupations starting in Grade 11 or Grade 12 through the Co-operative Education program. Students have an opportunity to become registered apprentices and work towards becoming a certified journeyperson in a skilled trade while completing their secondary school diploma.

Visit the OYAP website:
http://www.ugdsb.on.ca/schooltocareer/oyap/

## DUAL CREDIT

## Attend Conestoga College and earn High

 School and College Credits!Our Dual Credit program is approved by the Ministry of Education and allows students, while they are still in secondary school, to take college or apprenticeship courses that count towards both their Ontario Secondary School Diploma (OSSD) and a postsecondary certificate, diploma, or degree, or a Certificate of Apprenticeship. Visit the UGDSB Dual Credit website:
http://www.ugdsb.on.ca/schooltocareer/dualcredit
Please choose the placeholder FTEDU4T in myBlueprint, and make an appointment with a Guidance counselor for more information including the application package.

## Some potential course offerings include:

- Auto Service Technician
- Motive Power
- Motorcycle
- Truck and Coach
- General Machinist
- Welder
- Brick and Stone Mason
- Construction
- Cook
- Food Production
- Community Leadership
- Design Fundamentals
- Early Childhood Educator


## BOARD PROGRAMS

## COMMUNITY ENVIRONMENTAL LEADERSHIP PROGRAM (CELP) http://www.ugdsb.on.ca/celp

CELP is a 4-credit environmental leadership program based each day out of Camp Edgewood in Eden Mills. As a community of 24, students have a fall canoe or winter snowshoe trip, and teach grade fives the Earthkeepers nature program.

Students take ENG2DK, GLC2OK (.5cr), CHV2OK (.5cr), IDP3OK, PAD2OK

## DA VINCI ARTS \& SCIENCE ENVIRONMENTAL LEADERSHIP PROGRAM http://www.thedavinciprogram.ca/

The da Vinci Arts \& Science Environmental Leadership Program is John F. Ross CVI's exciting interdisciplinary program open to all grade 11 students from across the Upper Grand District School Board. Students will have the opportunity to obtain 4 Grade 11 credits (English ENG 3U, Biology SBI 3U, Visual Arts AVI 3M and Psychology, Sociology and Anthropology HSP 3M) in a natural setting nestled amongst the hiking trails, forests and ponds of the Arboretum at the University of Guelph.
*Applications available in Guidance. This program cannot be chosen on-line as it is offered by John F. Ross.

HEADWATERS: A JOURNEY TO THE SOURCE http://www.ugdsb.on.ca/celp

We are living in a time of environmental challenge that requires young people to be heroes. Heroes are willing to step away from what they know and how they think to explore more sustainable ways of living. Join the Headwaters journey to travel to the wilderness, learn about current issues, and work with others on solutions while earning four high school credits. Spend your days at Camp Edgewood outside, paddling, gardening, snowshoeing, reading environmental literature, and learning in a community of peers. Prepare for postsecondary by learning inquiry, critical thinking and teamwork skills while investigating and reflecting on possible career and life options.

There is a course fee of $\$ 750$ for Headwaters to pay for trips and for our off site location in Eden Mills. No student is denied the opportunity to take CELP or Headwaters due to financial reasons. Please let us know if this is a concernWE WANT YOU TO APPLY so if money is an issue we have a bursary for the applications process.

Students will take CGR4MK, ENG4UK or ETC3MK, IDP4OK, PAD4OK

## URBAN ARTS: MADE IN GUELPH

http://urbanarts.ca/
Urban Arts is an innovative program designed for Grade 11 students with a keen interest in the Arts

The courses focus on the creative exploration of the arts and all levels of ability are welcome in this collaborative environment. Students will explore Music, Art, Drama and English in an integrated, non-traditional environment at the Guelph Youth Music Centre. In this downtown setting, students will experience real world opportunities with the teaching staff, professional local artists, and mentors from the University of Guelph.

Download the application from the Guelph CVI website or UrbanArts.ca.

The course code MADE automatically includes the following courses:

- Music-AMC3M Music for Creating
- Art- AWT3M Non Traditional Media
- Drama- ADD3M Drama Production
- English- ENG3U English University level or ENG3C College Level


## E-LEARNING - ONLINE COURSES

E-Learning Ontario provides School Boards with online tools, courses and learning resources. Please see your guidance counselor to determine if this option is available to you. All decisions are based on the principal's discretion.

A successful online, e-Learner will be:

1. Computer literate with a personal computer and internet access
2. Self-motivated
3. Problem solver
4. Organized
5. Self-directed
6. Able to manage time and multitask
7. Flexible with a willingness to learn
8. A critical thinker
9. An effective communicator

## NIGHT SCHOOL

Secondary School Credit Courses
Course materials fee $\$ 20$ (non-refundable)
Hybrid classes combine the benefits of face-toface learning, online collaboration and self-paced learning - blending flexibility with a mix of instructional strategies and media. Students can choose which location to attend face-to-face, and complete the online components during the rest of the week.

SPRING TERM - 10 WEEKS

- (approx. Mar 22 - May 26)

FALL TERM - 10 WEEKS

- (approx. Oct 13 - Dec 17)

COURSE OFFERINGS: (change each term)

- English, Grade 11 \& 12, College \& University Preparation (ENG3C, ENG3U, ENG4C, ENG4U)
- Mathematics, Grade 12 College Technology, University Preparation (MCT4C, MHF4U)
- Either Chemistry, College \& University Preparation (SCH3U, SCH4C, SCH4U) or Biology, College \& University Preparation (SBI3C, SBI3U, SBI4U)


## SUMMER SCHOOL

The Upper Grand District School Board is once again offering an extensive selection of courses this summer for students. There are four summer school program options:

- Summer Co-op Two Credit (220 hours)
- New credit (110 hours)
- Make-up/Upgrade (55 hours)
- e-Learning (Upper Grand, 110 hours)
- Dual Credit in partnership with Conestoga College

Please note - students may only register for one summer school program except for makeup/upgrade courses where two can be attempted

Summer School 2016 will run from Monday, July 4 to Friday, July 29, 2016. Classes run from 8:30 am to 2:00 pm daily.

## THE ARTS

The arts help students develop desirable skills that improve their overall achievement, even in unrelated subject areas. When a student studies the arts, the power of personal creativity is sparked and applied in many unique ways. The C.W.D.H.S Arts Department offers courses in Drama/Theatre Tech, Martial Arts (Dance), Media Arts, Music, and Visual Arts, allowing a student to explore areas of particular interest or experience a broad range of disciplines which will enhance his or her experiences in high school and beyond. Courses are offered at the Open as well as at the University/College levels.

## Arts and Culture SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).


## Arts and Culture SHSM students will take:

- 4 credits in Arts and Culture
- 1 English credit
- 1 credit in either Business Studies or Canadian and World Studies
- 2 Co-operative Education credits to gain workplace experience that enables students to refine, extend, and practice sector specific knowledge and skills


## Possible Arts careers include:

- Apprenticeship - gem setter/goldsmith, stage sound and light technician
- College - photographer, graphic artist, actor, set designer, costume designer, cinematography, film, TV broadcasting, radio broadcasting, animation
- University - journalist, writer, visual artist, conductor, actor, teacher, screenwriting, directing, curator
- Entry level workplace - photographic and film processor, printing machine operator, sign maker


## DANCE (Martial Arts)

## Grade 10 Dance - Pacific Rim/Asian Martial <br> Arts (Open - ATO2O)

Prerequisite: None
This course requires students to develop their skills and learn the theoretical basis for working with anatomical structure in executing martial arts movements. Student learning will include the processes that form the basis for creating, the historical development of martial arts, and students' own aesthetic appreciation of martial arts as they participate in the class, rehearsals, and performances; and the specialized vocabulary associated with martial arts.
Note: Martial arts is the focus of this course. Selfdefense, physical fitness, and martial arts history will be emphasized. A course fee of $\$ 25$ is required for a traditional uniform.

## Grade 11 Dance - Pacific Rim/ Asian Martial Arts (Open - ATO3O)

Prerequisite: None
This course will give students opportunities to express themselves through martial arts. Students will develop technical skills; study the historical aspects of various martial arts forms and their function in specific cultures and evaluate performances.
Note: Martial arts is the focus of this course. Selfdefense, physical fitness, and martial arts history will be emphasized. A course fee of $\$ 25.00$ is required for a traditional uniform.

## Grade 11 Dance - Pacific Rim/Asian Martial

 Arts (University/College Preparation - ATO3M)Prerequisite: Martial Arts, grade 10, open (ATO201)
This intermediate course emphasizes the development of technical, composition and presentation skills in one or more martial arts styles. Students will acquire and refine martial arts skills; compose and present increasingly complex dance works; interpret and evaluate a variety of presentations; and study the historical development of various forms and their function in specific cultures.
Note: Martial arts is the focus of this course. Selfdefense, physical fitness, and martial arts history will be emphasized.

Grade 12 Dance - Pacific Rim/Asian Martial Arts (University/College Preparation - ATO4M)

Prerequisite: Martial Arts, grade 10 or 11, open or mixed (ATO2O1, ATO3O1 or ATO3M1) This advanced course emphasizes the development of technical proficiency and the creation and presentation of complex compositions. Students will acquire increasingly difficult technical skills; assume leadership as martial artists, choreographers, and production personnel; analyze and evaluate sparring performances; and study historical and cultural aspects of martial arts.
Note: Martial arts is the focus of this course. Selfdefense, physical fitness, and martial arts history will be emphasized.

## DRAMA

## Grade 9 Drama (Open - ADA10)

Prerequisite: None
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 analyze drama, and then reflect on the experiences to develop an understanding of themselves, the art form, and the world around them.

## Grade 10 Drama (Open - ADA2O)

Prerequisite: None
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.

## Grade 11 Drama (Open - ADA3O)

Prerequisite: None
This course requires students to engage in dramatic processes and the presentation of dramatic works, and emphasizes the application of drama skills in other contexts and opportunities. Students will interpret and present works in a variety of dramatic forms, create and script original works, and critically analyze the processes involved in producing dramatic works. Students will develop a variety of skills related to collaboration and the presentation of dramatic works.

## Grade 11 Drama (University/College Preparation ADA3M)

Prerequisite: Drama, grade 9 or 10, open, (ADA10 or ADA20)
This course requires students to create and perform in dramatic presentations. Students will analyze, interpret, and perform dramatic works from various cultures and time periods. Students will research various acting styles and conventions that could be used in their presentations, and analyze the functions of playwrights, directors, actors, designers, technicians, and audiences.

## Grade 12 Drama (University/College Preparation - ADA4M)

Prerequisite: Drama, grade 11, mixed or open (ADA3M or ADA3O)
This course requires students to experiment individually and collaboratively with forms and conventions of both drama and theatre from various cultures and time periods. Students will interpret dramatic literature and other text and media sources while learning about various theories of directing and acting. Students will examine the significance of dramatic arts in various cultures, and will analyze how the knowledge and skills developed in drama are related to their personal skills, social awareness, and goals beyond secondary school.
Note: Students seeking to take ADA4M without the prerequisite must have taken at least one previous Drama class and be prepared to present an audition or portfolio for admission into the course.

## Grade 10 Theatre Technology (Open - ADV2O)

 Prerequisite: NoneThis course requires students to examine the technical aspects of stage production. Students will become familiar with sound and lighting equipment in order to complement various presentations and performances. Through hands-on experience and project-based learning, elements of lighting, set design and audio production will be integral aspects of the course. Students will have the opportunity to use this transferable knowledge beyond the classroom as they become experts in the technical side of production work. Although students enrolled in this course are not required to become members of our production team, they will be encouraged to use the knowledge they gain to enhance school projects and activities.

## Grade 11 Theatre Technology (Open - ADV3O) Prerequisite: None

This course requires students to examine the technical aspects of stage production. Students will become familiar with sound and lighting equipment in order to complement various presentations and performances. Through hands-on experience and project-based learning, elements of lighting, set design and audio production will be integral aspects of the course. Students will have the opportunity to use this transferable knowledge beyond the classroom as they become experts in the technical side of production work. Although students enrolled in this course are not required to become members of our production team, they will be encouraged to use the knowledge they gain to enhance school projects and activities.

## Grade 12 Theatre Technology

(University/College Preparation - ADV4M)
Prerequisite: Any Senior level Arts course
This course builds upon the technical aspects of stage production. Students will become familiar with sound and lighting equipment in order to complement various presentations and performances. The creative process will be examined through hands-on project-based learning. The elements of lighting, set design and audio production will be integral aspects of the course. Students will have the opportunity to use this transferable knowledge beyond the classroom as they become experts in the technical side of production work. Although students enrolled in this course are not required to become members of our production team, they will be encouraged to use the knowledge they gain to enhance school projects and activities.

## Grade 12 Exploring and Creating the Arts (Open - AEA4O) / Drama - Production (University/College Preparation - ADD4M) Prerequisite: Any Senior level Arts course Note: University bound students should select ADD4M

This course offers students the opportunity to explore connections between dance, drama, media arts, music, and/or visual arts. Students will use the creative process individually and/or collaboratively to produce integrated artworks that draw on various disciplines, and they will critically analyze art works and determine how interpreting these works affects their own development. Students will develop responsible practices that are transferable beyond the classroom. They will explore solutions to integrated arts challenges and discover that art is everywhere, influencing and reflecting society.

## MEDIA ARTS

## Grade 10 Media Arts (Open - ASM20)

Prerequisite: None
This course enables students to create media art works by exploring new media, emerging technologies such as digital animation, and a variety of traditional art forms such as film, photography, video, and visual arts. Students will acquire communications skills that are transferable beyond the media arts classroom and develop an understanding of responsible practices related to the creative process. Students will develop the skills necessary to create and interpret media art works.

## Grade 11 Media Arts (Open - ASM3O) <br> Prerequisite: None

This course enables students to create media art works using available and emerging technologies such as computer animation, digital imaging, and video, and a variety of media. Students will explore the elements and principles of media arts, the connections between contemporary media art works and traditional art forms, and the importance of using responsible practices when engaged in the creative process. Students will develop the skills necessary to create and interpret media art works.

## Grade 11 Media Arts (University/College

 Preparation - ASM3M)Prerequisite: Any grade 9 or 10 Arts credit Highly Recommended: Media Arts, grade 10, open (ASM2O)
This course emphasizes the development of the knowledge and skills required for the production of media art works (e.g. short films, documentary films, and computer animation with synthesized sound). Students will develop an appreciation of the history of media arts through analyzing specific works, and will create media art works using a variety of technologies (e.g., digital camera, photo-imaging software, computermodeling software, synthesizer, film editing software, multi-track sound recording).

## Grade 12 Media Arts (University/College Preparation - ASM4M)

Prerequisite: Media Arts, grade 11 (ASM3M) Note: Students who excelled in ASM30 may gain entry to ASM4M in consultation with the teacher This course emphasizes the refinement of media arts skills through the creation of a thematic body of work by applying traditional and emerging technologies, tools, and techniques such as multimedia, film, computer animation, installation art, and performance art. Students will develop works that express their views on contemporary issues and will create portfolios suitable for use in either career or postsecondary education applications. Students will critically analyze the role of media artists in shaping audience perceptions of identity, culture, and community values.

## MUSIC

## Grade 9 Instrumental Music (Open - AMU1O)

Prerequisite: None
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.

## Grade 9 Vocal Music (Open - AMV1O)

Prerequisite: None
This course emphasizes the creation and performance of vocal 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 vocal music, and will develop a variety of skills transferable to other areas of their life.

Gr. 10 Instrumental Music - (Open- AMU2O) Prerequisite: None
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.

## Gr. 10 Vocal Music (Open - AMV2O) Prerequisite: None

This course emphasizes the creation and performance of vocal 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 vocal music, and will develop a variety of skills transferable to other areas of their life.

## Grade 11 Beginner Guitar (Open - AMG3O) Prerequisite: None

This course develops musical literacy through guitar performance and the preparation and presentation of music productions. Students perform works at a level consistent with previous experience on the guitar. Using a wide variety of traditional and contemporary music, students explore and develop musical ability on the guitar. The course examines how music is organized through arrangement, composition and improvisation for the guitar and occasionally other instruments and the voice. Study includes chording, notation, technique, understanding the fingerboard, the guitar's role in various musical styles and composition and arranging projects that feature guitars.

## Gr. 11 Vocal Music (University/College Preparation - AMV3M)

Prerequisite: Vocal Music, Grade 9 or 10, open (AMV1O or AMV2O)
This course provides students with opportunities to develop their musical literacy through the creation, appreciation, analysis, and performance of vocal music, including traditional, commercial, and art music. Students will apply the creative process when performing appropriate technical exercises and repertoire and will employ the critical analysis processes when reflecting on, responding to, and analyzing live and recorded performances. Students will consider the function of music in society and the impact of music on individuals and communities. They will explore how to apply skills developed in music to their life and careers.

## Gr. 11 Instrumental Music (University/College Preparation - AMU3M) <br> Prerequisite: Instrumental Music, Grade 9 or 10, open (AMU1O or AMU2O)

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

## Gr. 12 Vocal Music (University/College <br> Preparation - AMV4M)

Prerequisite: Vocal Music, Grade 11, University/College (AMV3M)
This course enables students to enhance their musical literacy through the creation, appreciation, analysis, and performance of music. Students will perform traditional, commercial, and art music, and will respond with insight to live and recorded performances. Students will enhance their understanding of the function of music in society and the impact of music on themselves and various communities and cultures. Students will analyze how to apply skills developed in music to their life and careers.

## Gr. 12 Instrumental Music (College- University Preparation - AMU4M)

Prerequisite: Instrumental Music, Grade 11, University/College (AMU3M)
This course enables students to enhance their musical literacy through the creation, appreciation, analysis, and performance of music. Students will perform traditional, commercial, and art music, and will respond with insight to live and recorded performances. Students will enhance their understanding of the function of music in society and the impact of music on themselves and various communities and cultures. Students will analyze how to apply skills developed in music to their life and careers.

## VISUAL ART

## Grade 9 Visual Art (Open - AVI1O) <br> Prerequisite: None

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. This course will provide students with opportunities to develop skills in ceramic sculpture, drawing, painting, and mixed media.

## Grade 9 Expressions of Aboriginal Cultures (Open - NAC1O) <br> Prerequisite: None

This course examines Aboriginal cultures in Canada through an exploration of art forms painting, sculpture, storytelling, dance, and music - created by Aboriginal artists. Students will learn to identify Aboriginal art forms and describe relationships between the art forms and Aboriginal traditions, philosophy, and culture. Students will also create their own art forms to express their understanding of Aboriginal identity, relationships, and sovereignty.

## Grade 10 Visual Art (Open - AVI2O) Prerequisite: None

Recommended: Visual Arts, grade 9, open (AVI1O) 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. In addition to developing students' existing skills, this course will include ceramics, printmaking, drawing, painting, and mixed media.

Grade 10 Arts \& Crafts (Open - AWA2O)
Prerequisite: None
Recommended: Visual Arts, grade 9, open (AVI1O)
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. Students will make useful and decorative hand-made creations with calligraphy, ceramics papier maché, and screen printing.

## Grade 11 Visual Art (University/College Preparation - AVI3M)

Prerequisite: Visual Arts, grade 9 or 10, open (AVI1O or AVI2O)
Recommended: Both AVI1O and AVI2O
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 emergent technologies. Students will use the critical analysis process when evaluating their own work and the work of others. This course will introduce students to media such as watercolor painting, large-scale clay sculpture, and mixed media.

## Grade 11 Arts \& Crafts (Open - AWA3O)

Prerequisite: None
Recommended: Visual Arts, grade 9 or 10
(AVI1O, AVI2O); Arts \& Crafts, grade 10 (AWA2O)
This course focuses on studio activities in one or more of the visual arts, including drawing, painting, sculpture, photography, printmaking, collage, and/or multimedia art. Students will use the creative process to create art works that reflect a wide range of subjects and will evaluate works using the critical analysis process.
Students will also explore works of art within a personal, contemporary, historical, and cultural context. Studio work explores plaster mold making, various casting techniques, lino block printing making, large-object fabrication, as well as clay sculpture.

## Grade 11 Photography and Photo Arts

 (University/College Preparation - AWQ3M) Prerequisite: Visual Arts, grade 9 or 10, open (AVI1O or AVI2O)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 emergent technologies. Students will use the critical analysis process when evaluating their own work and the work of others. This course will explore the 'artistic' side of photography using traditional film and darkroom processes as well as mixed media.
Note: Film cameras will be provided, but students must have unlimited access to a compact (point-and-shoot) digital camera or DSLR.

## Grade 12 Visual Art (University/College Preparation - AVI4M)

Prerequisite: Visual Arts, grade 11, University/College (AVI3M)

This course focuses on enabling students to refine their use of the creative process when creating and presenting two-and threedimensional art works by 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. Students will refine their skills in drawing, painting and sculpture, and will produce a portfolio of works that reflects their artistic accomplishments over the course of their high school career.

## Grade 12 Photography and Photo Arts (University/College Preparation - AWQ4M)

 Prerequisite: Photography and Photo Arts, grade 11 (AWQ3M)This course focuses on enabling students to refine their use of the creative process when creating and presenting two-and threedimensional art works by 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. This course will extend the darkroom and digital experiences of AWQ3M1 for those students pursuing a photography pathway in SHSM or as a post-secondary destination. Note: Film cameras will be provided, but students must have unlimited access to a compact (point-and-shoot) digital camera or DSLR.

## BUSINESS, CAREERS \& ECONOMIC STUDIES

Business activity affects the daily lives of all Canadians as they work, spend, save, invest, travel, and play. It influences jobs, incomes, and opportunities for personal enterprise. Eventually, all students will encounter the world of business and they must be prepared to engage in business activity with confidence and competence. All people need to understand how business functions, the role it plays in our society, the opportunities it generates, the skills it requires, and the impact it can have on their own lives and on society, today and in the future. The Business Studies program will teach students skills that they will use for the rest of their lives. The Business Studies program will build a strong foundation for those who wish to move on to further study and training in specialized areas such as management, international business, marketing, accounting, information and communication technology, personal finance or entrepreneurship. It will also provide practical skills for those who wish to move directly into the workplace.

## Business Specialist Certificate

The Business department believes that students benefit from taking business courses as a package. A certificate is granted to graduates who have completed a full program in Business Studies, consisting of any 6 Business Studies credits.

## Business SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).


## Business SHSM students will take:

- 4 Business credits
- 1 English credit
- 2 Math credits
- 2 Co-operative Education credits to gain workplace experience that enables students to refine, extend, and practice sector specific knowledge and skills


## Possible business careers include:

- Apprenticeship - parts technician, special events coordinator, entrepreneur
- College - conference and event planner, legal secretary, entrepreneur
- University - financial and investment analyst, web designer and developer, entrepreneur
- Entry level workplace - accounting clerk, banking clerk, real estate agent, entrepreneur


## Certificate of International Studies

Combine your interest in Business, Canadian \&
World Studies and Languages, to earn a Certificate of International Studies. Students must complete a minimum of 3 of the senior courses listed below, 1 from each discipline, in order to receive this award. Ask for details!

## BUSINESS

BBB4M - International Business Fundamentals
IDC4U1 - International Studies
Canadian \& World Studies
CGG3O - Travel and Tourism: A Geographic Perspective
CHY4U - World History since the Fifteenth
Century
CLN4U - Canadian and International Law
CPW4U - Canadian and International Politics
French and International Languages
FIF3U - Grade 11 Core French
FIF4U - Grade 12 Core French
FSF3U - Grade 11 Immersion French
FSF4U - Grade 12 Immersion French
LWSCU - Grade 11 Spanish
LWSDU - Grade 12 Spanish
Ask your teacher for more detailed information.

## CAREER STUDIES

## Grade 10 Career Studies (Open - GLC2O) <br> Prerequisite: None

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 post-secondary 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 is a 0.5 credit, offered consecutively with 0.5 Civics for all grade 10 students)

Note 1: This course will also be offered for French Immersion students (GLC2OF)

Note 2: This course will also be offered for students taking the Physical Education Hockey course. Student must choose FTEHOC to add the Hockey Program to their Course Selection (Includes GLC20 and CHV20, both are . 5 of a credit)

## ECONOMICS

## Grade 11 The Individual and the Economy

 (University/College Preparation - CIE3M)Prerequisite: Canadian History, grade 10, Academic or Applied (CHC2P or CHC2D) This course explores economic concepts relating to the Canadian economic system that will help students make informed decisions about how to use resources to satisfy wants and needs. Students will use economic concepts and models, as well as methods of economic inquiry, to analyze the choices they will make during their lives as consumers, contributors, and citizens in a mixed economy. Understand the marketplace!

## Grade 12 Analyzing Current Economic Issues (University Preparation - CIA4U) <br> Prerequisite: Any university or university/college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities. <br> This course explores the choices that individuals and societies make about the use of resources in a competitive global economy. Students will use economic concepts and models, as well as methods of economic inquiry, to analyze current economic issues and make informed economic choices based on their analysis. Excellent prep for university!

## BUSINESS

Grade 9/10 Introduction to Business and Personal Finance (Open - BBI1O/2O) Prerequisite: None
Note: Students may select BBI at the Grade 9 OR 10 level (cannot take both).
Take a look at the world of business! 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.

## Grade 10 Information and Communication Technology in Business (Open - BTT2O)

 Prerequisite: NoneGet computer literate! This course introduces students to information and communication technology in a business environment and builds a foundation of digital literacy skills necessary for success in a technologically driven society. Students will develop word-processing, spreadsheet, database, desktop publishing, presentation software, and website design skills. Throughout the course, there is an emphasis on digital literacy, effective electronic research and communication skills, and current issues related to the impact of information and communication technology.

## Grade 11 Financial Accounting Fundamentals (University/College Preparation - BAF3M)

 Prerequisite: None Understand the dollars \& cents of business! 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 merchandising business, computerized accounting, financial analysis and current issues and ethics in accounting.
## Grade 11 Entrepreneurship: The Venture (College Preparation - BDI3C)

Prerequisite: None

Catch the entrepreneurial spirit! 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.

## Grade 11 Information and Communication Technology: The Digital Environment (Open BTA3O) <br> Prerequisite: None

IT for today's world! This course prepares students for the digital environment. Using a hands-on approach, students will further develop information and communication technology skills through the use of common business software applications. The concept and operation of an ebusiness will be explored and students will design and create an e-business web site. The skills developed in this course will prepare students for success in the workplace and/or post-secondary studies.

## Grade 11 Marketing: Goods, Services, Events (College Preparation - BMI3C)

## Prerequisite: None

Become marketing-savvy! This course introduces the fundamental concepts of product marketing, which includes the marketing of goods, services, and events. Students will examine how trends, issues, global economic changes, and information technology influence consumerbuying habits. Students will engage in marketing research, develop marketing strategies, and produce a marketing plan for a product of their choice.

Grade 11 Marketing: Retail and Services (Workplace Preparation - BMX3E)
Prerequisite: None
Note: to be offered every other year starting 2016/17
Sell! Sell! Sell! This course focuses on marketing activities in the retail and service sectors.
Students will examine trends and global influences on marketing decisions, and will learn about the importance of customer service in developing a customer base and maintaining customer loyalty. Through hands-on learning, students will develop personal selling and information technology skills that will prepare them for a variety of marketing-related positions in the workplace.

Grade 12 Business Leadership: Management Fundamentals (University/College Preparation - BOH4M)
Prerequisite: Any university, university/ college, or college preparation course in business studies, English, or Canadian and world studies.
Become a top leader and manager! 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.

## Grade 12 Business Leadership (Workplace

 Preparation - BOG4E)Prerequisite: None
*** Note: offered every other year starting 2017/18 ***
This course helps students prepare for managerial positions in their future careers. Students will focus on the development of core skills required to become a successful manager, including operations management, inventory control, marketing, financial planning, scheduling, and communication. Students will also explore the management challenges of hiring, training, and motivating employees, and complying with legal requirements.

## Grade 12 Entrepreneurship: Venture Planning in an Electronic Age (College Preparation BDV4C)

Prerequisite: None
Plan to make some money! This course provides the student with the opportunity to develop and apply entrepreneurial skills through the creation of a venture plan that capitalizes on the potential of e-commerce. Students will research and identify an opportunity for a venture. They will then complete the components of a venture plan that includes a website.

Grade 12 Financial Accounting Principles
(University/College Preparation - BAT4M) Prerequisite: Financial Accounting Fundamentals, grade 11, University/College (BAF3M)
Excellent prep for post-secondary studies in accounting! This course introduces students to advanced accounting principles that will prepare them for post-secondary studies in business. Students will learn about financial statements for various forms of business ownership and how those statements are interpreted in main business decisions. This course further develops accounting methods for assets and introduces accounting for partnerships, corporations and sources of financing.

## Grade 12 International Business Fundamentals (University/College Preparation - BBB4M)

Prerequisite: Any university, university/ college, or college preparation course in Business Studies, English, or Canadian and World Studies. Enter the exciting world of international trade! This course provides an overview of the importance of international business and trade in the global economy and explores the factors that influence success in international markets. Students will learn about the techniques and strategies associated with marketing, distribution and managing international businesses effectively. This course prepares students for post-secondary programs in business, including international business, marketing and management.

## Grade 12 Interdisciplinary Studies International Studies (University Preparation IDC4U1)

Prerequisite: any university or university/college preparation course in Business, Canadian \& World Studies or Social Sciences and Humanities.
Law, Economics and International Business all in one course! Our world is increasingly interconnected and interdependent! Students today face an unprecedented range of social, legal, economic, cultural, environmental, political, and technological issues. This interdisciplinary course explores the opportunities and challenges presented by today's global village. Students planning to pursue post-secondary programs in business or international studies will find this course of particular interest.

Grade 12 Student Council Leadership (University Preparation - IDC4U2)
Prerequisite: any university or university/college preparation course in Business, Canadian \& World Studies or Social Sciences and Humanities.
This course examines methods of event planning within the student government of Student's Council. Using an interdisciplinary approach, students will examine the philosophy and organizational structure of the student government and school. Using diverse resources, students will explore how individuals become leaders in their communities, how to incorporate team building strategies, as well critical thinking and conflict management tactics. Students will plan, organize, communicate, and implement an event in the school community, applying their theoretical foundation and skills to real-life situations.

## CANADIAN \& WORLD STUDIES/SOCIAL SCIENCES \& HUMANITIES/NATIVE STUDIES

Studies in Social Sciences \& Humanities/ Canadian \& World Studies/Native Studies provide students with essential knowledge and transferable skills that are applicable not only in their personal lives but provide students with a firm foundation for a variety of post-secondary destinations. While using discipline-specific skills, these courses explore the ways in which individuals influence and are influenced by cultures, societies, institutions, communities and families. They will enable students to become responsible, active and informed citizens who value an inclusive society. Students can select from a variety of courses in the areas of geography, history, civics, law, family studies, general social sciences and native studies.

## Environment SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).


## The Environment SHSM students will take:

- 4 Environment major credits
- 2 English credits
- 1 Math credit
- 2 Co-operative Education credits to gain workplace experience that enables students to refine, extend, and practice sector specific knowledge and skills


## Possible Environmental careers include:

- Apprenticeship - arborist, horticultural technician
- College - conservation and fishery officer, soil testing technologist, soil ecologist
- University - environmental biologist, waste diversion consultant, environmental and occupational toxicologist, environmental engineer
- Entry level workplace - outdoor sport and recreation guide, recycled paper handler


## Health and Wellness SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).


## Health and Wellness students will take:

- 4 Health and Wellness major credits
- 2 English credits
- 1 Math credit
- 1 Science or Social Science \& Humanities or Health and Physical Education credit
- 2 Co-operative Education credits to gain workplace experience that enables students to refine, extend, and practice sector specific knowledge and skills


## Possible Health and Wellness careers include:

- Apprenticeship - child development practitioner, developmental services worker, child and youth worker
- College - ambulance attendant, dental hygienist, pharmacy technician, registered nurse, athletic trainer
- University - audiologist, dentist, dietician, pharmacist, kinesiologist, sports medicine doctor
- Entry level workplace - certified personal trainer, lifeguard, hospital information clerk, medical receptionist


## Certificate of International Studies

Combine your interest in Canadian \& World Studies, Languages and Business, to earn a Certificate of International Studies. Students must complete a minimum of 3 of the senior courses listed below, 1 from each discipline, in order to receive this award. Ask for details!

## CANADIAN \& WORLD STUDIES

CGG3O - Travel and Tourism: A Geographic Perspective
CHY4U - World History since the Fifteenth
Century
CLN4U - Canadian and International Law
CPW4U - Canadian and International Politics
Business
BBB4M - International Business Fundamentals
IDC4U1 - International Studies
French and International Languages
FIF3U - Grade 11 Core French
FIF4U - Grade 12 Core French
FSF3U - Grade 11 Immersion French
FSF4U - Grade 12 Immersion French
LWSCU - Grade 11 Spanish
LWSDU - Grade 12 Spanish
Ask your teacher for more detailed information.

## GEOGRAPHY

## Grade 9 Issues in Canadian Geography (Academic - CGC1D)

Prerequisite: None
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.

## Grade 9 Issues in Canadian Geography (Applied - CGC1P)

Prerequisite: None
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.

## Grade 9 Issues in Canadian Geography (Essential - CGC1PG)

## Prerequisite: None

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.

## Grade 11 Forces of Nature: Physical Processes and Disasters (University/College Preparation - CGF3M)

Prerequisite: Geography of Canada, grade 9, Academic or Applied (CGC1P or CGC1D) *** Note: offered every other year starting 2017/18***
This course examines Earth's physical patterns and processes and how they create natural disasters and can contribute to human disasters. Students will explore how physical processes related to Earth's water, land, and air, as well as interactions between these systems, can affect the planet and its people. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate Earth's natural processes, to make predictions related to natural disasters, and to create plans to prepare for and/or respond to them.

## Grade 11 Travel and Tourism: A Geographic

 Perspective (Open - CGG3O)Prerequisite: Geography of Canada, Grade 9, Academic or Applied (CGC1P or CGC1D) This course focuses on issues related to travel and tourism within and between various regions of the world. Students will investigate unique environmental, socio cultural, economic, and political characteristics of selected world regions. They will explore travel patterns and trends as well as tensions related to tourism, and will predict future tourism destinations. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate the impact of the travel industry on natural environments and human communities.

## Grade 12 The Environment \& Resource Management (University/College Preparation CGR4M)

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

## HISTORY

## Grade 10 Canadian History since World War I (Academic - CHC2D)

Prerequisite: None
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.

## Grade 10 Canadian History since World War I (Applied - CHC2P)

Prerequisite: None
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 presentday Canada.

## Grade 10 Canadian History since World War I (Essential - CHC2L)

## Prerequisite: None

This course focuses on the connection between the student and key people, events and themes in Canadian contemporary studies. Students explore a variety of topics highlighting individuals and events that have contributed to the story of Canada. The major themes of Canadian Identity, internal and external relationships and changes since 1914, are explored through guided investigation. Students have the opportunity to extend analytical skills with a focus on identifying and interpreting events and perspectives and making connections. Students practice reading, writing, visual, and oral literacy skills, and mathematical literacy skills to identify and communicate ideas in a variety of media.

## Grade 11 History since 1900: Global and Regional Interactions (Open - CHT3O) Prerequisite: Canadian History, Grade 10, Academic, Applied, or Essential (CHC2P, CHC2D, or CHC2L)

Note: offered every other year starting 2016/17 This course focuses on major developments in world history from 1900 to the present. Students will explore the causes and consequences of global and regional conflicts, the impact of significant individuals and social movements, and the effects of social, economic, and political developments around the world. 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 interactions within and between nations and other historical developments and events, including those that continue to affect people in various parts of the world.

## Grade 11 World History to the End of the

 Fifteenth Century (University/College Preparation - CHW3M)Prerequisite: Canadian History, Grade 10, Academic or Applied (CHC2P or CHC2D) This course explores the history of various societies and civilizations around the world, from earliest times to around 1500 CE. Students will investigate a range of factors that contributed to the rise, success, and decline of various ancient and pre-modern societies throughout the world and will examine life in and the cultural and political legacy of these societies. 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.

## Grade 12 Adventures in World History (Workplace Preparation - CHM4E)

 Prerequisite: Canadian History, Grade 10, Academic, Applied, or Essential (CHC2P, CHC2D, or CHC2L)This course examines significant developments and events in world history from earliest times to the present. Students will explore a variety of social, cultural, economic, and political developments in different regions of the world and during different periods. In addition to investigating how conflict, religion, work, and technology have helped shape people's lives, students will examine the contributions of some significant individuals to our global heritage. Students will apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating a variety of human experiences in world history.

## Grade 12 World History since the Fifteenth Century (University Preparation - CHY4U)

Prerequisite: Any university or university/college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities.
This course traces major developments and events in world history since approximately 1450. Students will explore social, economic, and political changes, the historical roots of contemporary issues, and the role of conflict and cooperation in global interrelationships. They will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, as they investigate key issues and ideas and assess societal progress or decline in world history.

## LAW

## Grade 11 Understanding Canadian Law in Everyday Life (Workplace Preparation CLU3E) <br> Prerequisite: Canadian History, Grade 10,

 Academic, Applied, or Essential (CHC2P, CHC2D, or CHC2L)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.

## Grade 11 Understanding Canadian Law (University/ College Preparation - CLU3M)

Prerequisite: Canadian History, Grade 10, Academic or Applied (CHC2P or CHC2D) 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.

## Grade 12 Canadian and International Law (University Preparation - CLN4U)

Prerequisite: Any university or university/college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities. CLU3M is strongly recommended. This course explores a range of contemporary legal issues and how they are addressed in both Canadian and international law. Students will develop an understanding of the principles of Canadian and international law and of issues related to human rights and freedoms, conflict resolution, and criminal, environmental, and workplace law, both in Canada and internationally. Students will apply the concepts of legal thinking and the legal studies inquiry process, and will develop legal reasoning skills, when investigating these and other issues in both Canadian and international contexts.

## CIVICS

## Grade 10 Civics \& Citizenship (Open CHV2O)

## Prerequisite: None

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 is a 0.5 credit, offered consecutively with 0.5 Careers for all grade 10 students)

Note 1: This course will also be offered for French Immersion students (CHV2OF)

Note 2: This course will also be offered for students taking the Physical Education Hockey course. Student must choose FTEHOC to add the Hockey Program to their Course Selection (Includes GLC20 and CHV20, both are . 5 of a credit.)

## POLITICS

## Grade 12 Canadian and World Politics (University Preparation - CPW4U)

Prerequisite: Any university or
university/college preparation course in Canadian and world studies, English, or social sciences and humanities
This course explores various perspectives on issues in Canadian and world politics. Students will explore political decision making and ways in which individuals, stakeholder groups, and various institutions, including governments, multinational corporations, and non-governmental organizations, respond to and work to address domestic and international issues. Students will apply the concepts of political thinking and the political inquiry process to investigate issues, events, and developments of national and international political importance, and to develop and communicate informed opinions about them.

Note: only offered in conjunction with the Social Justice package to be offered every other year starting 2017/18
See description under "General Social Sciences"

## FAMILY STUDIES

## Grade 9/10 Food and Nutrition (Open HFN1O/2O)

Prerequisite: None
Note: Students may select HFN at the Grade 9 OR 10 level (cannot take both).
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 prepare food and introduces them to the use of social science research methods in the area of food and nutrition.

## Grade 10 Clothing (Open - HNL2O) <br> Prerequisite: None

This course introduces students to the world of clothing. Students will gain knowledge about clothing and demonstrate basic skills associated with various techniques and technologies used to create garments and accessories. Students will learn about the functions of clothing and accessories and what clothing communicates about the wearer. They will learn how to enhance their personal wardrobe by assessing garment quality, developing shopping strategies, and developing an understanding of the advantages and disadvantages of various retail formats. Students will develop research skills as they investigate topics related to clothing.

## Grade 11 Raising Healthy Children (Open HPC3O)

Prerequisite: None
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 behavior. Students will develop their research skills through investigations related to care giving and child rearing.

## Grade 11 Understanding Fashion (College Preparation - HNC3C)

## Prerequisite: None

Recommended: Grade 10 Clothing (HNL2O) This course introduces students to the world of fashion. Students will gain an understanding of theories related to fashion trends and of how culture, media, fashion cycles, retailing, and social and environmental factors influence fashion trends and consumer behavior. Students will use various tools, technologies, and techniques safely and correctly to create fashion items. They will apply knowledge of fibers, fabrics, and the elements and principles of design when creating and assessing fashion-related products. Students will develop research skills as they investigate topics related to fashion.

Grade 12 Families in Canada (University Preparation - HHS4U)
Prerequisite: Any university or university/college
preparation course in social sciences and
humanities, English, or Canadian and world studies.
This course enables students to draw on sociological, psychological, and anthropological theories and research to analyze 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.

## Grade 12 Personal Life Management (Open HIP4O)

Prerequisite: None
This course focuses on preparing students for living independently and working successfully with others. Students will learn to manage their personal resources to meet their basic needs for food, clothing, and housing. They will also learn about their personal, legal, and financial responsibilities and develop and apply interpersonal skills in order to make wise and responsible personal and occupational choices. Students will apply research and inquiry skills while investigating topics related to personal life management. The course emphasizes the achievement of expectations through practical experiences.

## Grade 12 Working with School- Age Children and Adolescents (College Preparation HPD4C)

Prerequisite: Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies.
This course prepares students for occupations involving school-age children and adolescents. Students will study a variety of theories about child behavior and development, and will have opportunities for research and observation and for practical experiences with older children. Students will become familiar with occupational opportunities and requirements related to working with older children and adolescents. They will develop research skills used in investigating child and adolescent behavior and development.

## GENERAL SOCIAL SCIENCES

Grade 11 Introduction to Anthropology, Psychology, and Sociology (University Preparation - HSP3U)
Prerequisite: English, grade 10, academic (ENG2D) or Canadian History, grade 10, academic (CHC2D)
This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science, and to become familiar with current thinking on a range of issues within the three disciplines.
Note: This course will also be offered in French to immersion students (HSP 3UF).

## Grade 11 Introduction to Anthropology, Psychology, and Sociology (College Preparation - HSP3C) <br> Prerequisite: None

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.

Grade 12 Challenge and Change in Society (University Preparation - HSB4U)
Prerequisite: Any university or university/college course in social sciences and humanities, English, or Canadian and world studies. Note: offered every other year as a SINGLE CREDIT course starting 2016/17
This course focuses on the use of social science theories, perspectives, and methodologies to investigate and explain shifts in knowledge, attitudes, beliefs, and behavior and their impact on society. Students will critically analyze how and why cultural, social, and behavioral patterns change over time. They will explore the ideas of social theorists and use those ideas to analyze causes of and responses to challenges such as technological change, deviance, and global inequalities. Students will explore ways in which social science research methods can be used to study social change.

## Grade 12 Social Justice: Political Challenges and Global Change (a two-course package; select FTESOJ) <br> Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies. <br> *** Note: offered every other year starting 2017/18*** <br> The Social Justice package fulfills the expectations of both CPW4U: Canadian and <br> World Politics (see description under "Politics") and HSB4U: Challenge and Change in <br> Society. The focus is on how to make positive social change locally and globally. Inequity, conflict and discriminatory systems will be investigated through hands-on, practical learning. Involvement at the food bank, meeting activists, and planning a major community fundraiser are some of the highlights. If you want to make a difference and are not sure how, begin to be the change you wish to see in the world by taking Social Justice.

## PHILOSOPHY

## Grade 11 Philosophy: The Big Questions (University/College Preparation - HZB3M) Prerequisite: None

This course encourages exploration of philosophy's big questions, such as: What is a meaningful life? What separates right from wrong? What constitutes knowledge? What makes something beautiful? What is a just society? Students will develop critical thinking and philosophical reasoning skills as they identify and analyze the responses of philosophers to the big questions and formulate their own response to them. Students will explore the relevance of philosophical questions to society and to their everyday life. They will develop research and inquiry skills as they investigate various topics in philosophy.

## RELIGION

## Grade 11 World Religions and Belief Traditions: Perspectives, Issues, and Challenges (University/College Preparation HRT3M) <br> Prerequisite: None <br> *** Note: offered every other year starting 2017/18***

This course provides students with opportunities to explore various world religions and belief traditions. Students will develop knowledge of the terms and concepts relevant to this area of study, will examine the ways in which religions and belief traditions meet various human needs, and will learn about the relationship between belief and action. They will examine sacred writings and teachings, consider how concepts of time and place influence different religions and belief traditions, and develop research and inquiry skills related to the study of human expressions of belief.

## NATIVE STUDIES

## Grade 10 First Nations, Métis, and Inuit Peoples in Canada (Open - NAC20)

 Prerequisite: NoneThis course explores First Nations, Métis, and Inuit peoples' relationships with Canada from pre-contact to the 21st century. Students will examine social, economic, political and military interactions that impact the contemporary realities of Aboriginal people in Canada in relation to identity, culture, community, land, and governance. Students will explore their own and others' ideas using the historical inquiry process to think critically and respond responsibly about civic questions raised today as a result of the changing relationships.

## Grade 11 Aboriginal Beliefs, Values, and Aspirations in Contemporary society (College Preparation - NBV3C)

Prerequisite: First Nations, Métis, and Inuit Peoples in Canada, Grade 10, Open (NAC20) or Canadian History, Grade 10, Academic or Applied (CHC2P or CHC2D)
This course focuses on the beliefs, values, and aspirations of Aboriginal peoples in Canada. Students will examine worldviews of Aboriginal peoples and the political, economic, cultural, and social challenges facing individuals and communities. Students will also learn how traditional and contemporary beliefs and values influence the aspirations and actions of Aboriginal peoples.

Grade 11 Aboriginal Beliefs, Values and Aspirations in Contemporary Society (Workplace Preparation - NBV3E)
Prerequisite: First Nations, Métis, and Inuit
Peoples in Canada, Grade 10, Open (NAC20) or Canadian History, Grade 10, Academic or Applied (CHC2P or CHC2D)
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.

## CO-OPERATIVE EDUCATION

Co-operative Education is a program that allows students to refine, extend, apply and practice classroom learning into supervised placements in the community. Co-operative Education courses cannot be used to meet the course requirements ( 6 U or $\mathrm{U} / \mathrm{M}$ courses) for university admission.

## Two credits in Co-operative Education can count as compulsory credits from group 1, group 2, or group 3 of the list of required courses for graduation.

## Co-op will enable you to:

- explore future career possibilities and meet SHSM requirements
- understand employer expectations in real job situations
- develop a positive self-image
- obtain the work experience often required by college and university programs
- apply and expand classroom knowledge
- work with state-of-the-art equipment and technology
- benefit from the expertise of people in your community
- develop the essential skills and the employability skills necessary for success in the workplace

How to apply for Co-operative Education:

- Select FTEC02 or FTEC04 for two or four credit Co-op in My Blueprint.
- Participate in a structured interview with the Coop teacher(s).


## Co-operative Education

Co-op placements are available in most subject areas and are influenced by employer availability. Co-op employment includes sectors such as technology, health and wellness, social services, business, hospitality and others. Dual Credit and OYAP programs are additional options for Co-op student. Students will investigate trends and resources to support their post-secondary employment, training, and/or education choices and develop a plan to help them meet their learning and career goals.

## How Does Co-op Work?

- The program combines a full semester, half-day or full-day work placement in the community with a school-based classroom component. Students are expected to be at their placement for three six hours per day
- A mandatory pre-placement classroom component prepares students for work through health and safety training, self-assessment tasks, and lessons on résumé and interview skills, confidentiality and employer expectations
- Students must successfully interview with a community employer prior to placement
- Competitive interviews may be conducted; students are not guaranteed a specific placement
- Students return to the classroom on a regular basis to share experiences, develop further skills and present assignments
- The co-op teacher monitors the work of the student at the placement, and works in consultation with the workplace supervisor to develop the curriculum (the Personalized Placement Learning Plan) to ensure that a meaningful experience takes place
- Regular Job Performance Appraisals are completed by the employer, in conjunction with the teacher
- Credits are earned by the submission of weekly reports, assignments, and the completion of the required number of hours at the placement
- Students are not paid while on the job during regular school time but earn credits for their work term
- Transportation costs, personal protective equipment and immunization required by the placement, are the responsibility of the student
- Accident \& liability insurance is carried by the School Board on the same basis as in-school programs


## ENGLISH

The English program in Grades 9 to 12 includes compulsory and optional courses. The compulsory courses emphasize strong core competencies in oral communication, reading and literature studies, writing, and media studies. As part of their program, students must take one compulsory course in English in each grade.

Optional courses provide students with opportunities to explore individual interests and to deepen or extend some of the knowledge and skills acquired in the compulsory courses. Regardless of their postsecondary destination, all students need to realize that literacy skills are employability skills. Powerful literacy skills will equip students to manage information technologies, communicate effectively and correctly in a variety of situations, and perform a variety of tasks required in most work environments.

English at both the College and University preparation level improves English language skills, including writing, reading and critical thinking. ENG 4 U and ENG 4C are required courses for all postsecondary pathways leading to careers in all economic sectors. A minimum mark of $70 \%$ is typically required for College and University acceptance.

Grade 12 English is a SHSM requirement in all sectors.

## For English, possible careers include:

- Apprenticeship - educational assistant, special events coordinator, child development practitioner
- College - court recorder, editorial assistant, journalist, writer
- University - critic, editor, elementary school teacher, journalist, linguist, secondary school teacher, translator, writer
- Entry level workplace - customer service, retail salesperson


## Grade 9 English (Academic - ENG1D)

 Prerequisite: NoneThis 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.

## Grade 9 English (Applied - ENG1P) <br> Prerequisite: None

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.

## Grade 9 English (Essential - ENG1L)

Prerequisite: None
This course provides foundational literacy and communication skills to prepare students for success in their daily lives, in the workplace, and in the English Grade 10 Workplace Preparation course. The course is organized by 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 in 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.

## Grade 10 English (Academic - ENG2D)

 Prerequisite: English, Grade 9, Academic (ENG1D)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.

Grade 10 English (Applied - ENG2P)
Prerequisite: English, Grade 9, Applied or Academic (ENG1P or ENG1D)
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.

## Grade 10 English (Essential - ENG2L)

Prerequisite: A Grade 9 English credit
This course provides extended foundational literacy and communication skills to prepare students for success in their daily lives, in the workplace, and 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 in 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, and reflect regularly upon their growth in these areas.

## Grade 11 Media Studies (Open - EMS3O)

 Prerequisite: English, Grade 10, Applied or Academic (ENG2P or ENG2D)Note: offered every other year starting 2016/17 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.

## Grade 11 English (College Preparation ENG3C)

Prerequisite: English, Grade 10, Applied or Academic (ENG2P or ENG2D)
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.

## Grade 11 English (University Preparation -

 ENG3U)Prerequisite: English, Grade 10, Academic (ENG2D)
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.

## Grade 11 English (Workplace Preparation ENG3E) <br> Prerequisite: Grade 10 English credit

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.

## Grade 12 English (College Preparation ENG4C)

Prerequisite: English, Grade 11, College or University (ENG3C or ENG3U)
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.

## Grade 12 English (University Preparation ENG4U)

## Prerequisite: English, Grade 11, University (ENG3U)

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 primarily for university, but the knowledge and skills may apply to both college and the workplace.

## Grade 12 English (Workplace Preparation ENG4E)

Prerequisite: Grade 11 English credit
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.

## Grade 12 Studies in Literature (University Preparation - ETS4U) <br> Prerequisite: English, Grade 11, University (ENG3U) <br> *** Note: offered every other year starting 2017/18***

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 analyze 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. Explore the world through the lens of great literature! Study the fiction, poetry and drama of a specific region of the world in combination with research into the cultural, historical, and political issues that affect the people of your chosen region.

## Grade 12 Studies in Literature (College Preparation - ETS4C)

Prerequisite: English, Grade 11, College or University (ENG3C or ENG3U)
*** Note: offered every other year starting 2017/18***
This course is for students with a special interest in literature. The course may focus on themes, genres, time periods, or countries. Students will study a variety of forms and stylistic elements of literary texts and respond personally, critically, and creatively to them. They will also investigate critical interpretations and complete an independent study project. Explore the world through the lens of great literature! Study the fiction, poetry and drama of a specific region of the world in combination with research into the cultural, historical, and political issues that affect the people of your chosen region.

## Grade 12 The Writer's Craft (College Preparation - EWC4C)

Prerequisite: English, Grade 11, College or University (ENG3C or ENG3U)
This course emphasizes knowledge and skills related to the craft of writing. Students will investigate models of effective writing; use a workshop approach to write a variety of works; and make considered decisions for improving the quality of their writing. They will also complete a creative or analytical independent study project and investigate opportunities for publication and for writing careers.

## Grade 12 The Writer's Craft (University Preparation -EWC4U)

Prerequisite: English, Grade 11, University (ENG3U)
This course emphasizes knowledge and skills related to the craft of writing. Students will analyze models of effective writing; use a workshop approach to produce a range of works; identify and use techniques required for specialized forms of writing; and identify effective ways to improve the quality of their writing. They will also complete a major paper as part of a creative or analytical independent study project and investigate opportunities for publication and for writing careers.

Grade 12 Literacy Course (Open - OLC 401) Eligibility requirement: Students who have been eligible to write the OSSLT at least twice and who have been unsuccessful at least once are eligible to take the course. 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.

## FRENCH \& INTERNATIONAL LANGUAGES

Studying other languages develops and reinforces literacy skills, enriches your English vocabulary and enables you to gain a deeper understanding of how language works. Studies show that second language learners experience increased mental flexibility and develop improved problem-solving skills. Proficiency in more than one language prepares you to compete successfully for jobs in a global economy and expands your career opportunities.

Speaking another language enables you to travel, explore and understand new cultures, and fully appreciate the diversity Canada offers. You will also develop a greater awareness of global issues, including those related to the environment and sustainability.
C.W.D.H.S. offers programs in Core French, French Immersion and Spanish.

Two credits in French as a second language beyond the grade 9 level can count as compulsory credits from group 1 and either group 2 or group 3 of the list of required courses for graduation.

A credit in Spanish can count as a compulsory credit from group 1 of the list of required courses for graduation.

## Certificate of International Studies

Combine your interest in Languages, Business, and Canadian \& World Studies to earn a Certificate of International Studies. Students complete a minimum of 3 courses listed below, 1 from each discipline. Ask for details!

FRENCH AND INTERNATIONAL LANGUAGES
FIF3U - Grade 11 Core French
FIF4U - Grade 12 Core French
FSF3U - Grade 11 Immersion French
FSF4U - Grade 12 Immersion French
LWSCU - Grade 11 Spanish
LWSDU - Grade 12 Spanish

Business
BBB4M - International Business Fundamentals
IDC4U1 - International Studies
Canadian \& World Studies
CGG3O - Travel and Tourism: A Geographic Perspective
CHY4U - World History since the Fifteenth Century
CLN4U - Canadian and International Law CPW4U - Canadian and International Politics

Possible career sectors using French and International Languages include:

- Media (Journalism) and film industry
- Tourism and travel services Industry including airlines and hotels
- Banks and insurance companies
- Local, Provincial and Federal governments
- International non-profit organizations
- Publishing companies
- Department of Defence and international embassies.
- Representatives in companies doing business internationally
- Health services
- Social services
- Immigration services
- Elementary schools, high schools, universities and colleges
- Customer Service Representatives (IT support)
- Translation and Interpretation


## CORE FRENCH

The Core French program offers you the opportunity to develop second language fluency to a level at which you can participate in conversations and discussions on familiar topics, understand the culture and institutions of French Canada and the French-speaking world, and live and work in a Francophone community.

Co-operative Education with a French work placement is also available for senior students.

## A Certificate of Core French Studies is awarded at Graduation to students who complete 4 credits of Core French, including 2 senior level courses.

## Grade 9 Core French (Academic - FSF 1D) Prerequisite: Minimum of 600 hours of French instruction, or equivalent.

This course provides opportunities for students to communicate and interact in French with increasing independence, with a focus on familiar topics related to daily life. Students will develop skills in listening, speaking, reading, and writing 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 skills necessary for lifelong language learning.

## Grade 9 Core French (Applied - FSF 1P)

Prerequisite: Minimum of 600 hours of French instruction, or equivalent.
This course provides opportunities for students to communicate and interact 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 skills necessary for lifelong language learning.

## Grade 10 Core French (Academic - FSF 2D) <br> Prerequisite: Core French, Grade 9, Academic (FSF 1D)

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 develop their skills in listening, speaking, reading, and writing 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 develop skills necessary for lifelong language learning.

## Grade 10 Core French (Applied - FSF 2P)

Prerequisite: Core French, Grade 9, Applied or Academic (FSF 1P or FSF 1D)
This course provides opportunities for students to communicate in French about everyday matters and topics of personal interest in real-life situations. Students will exchange information, ideas, and opinions with others in structured, guided, and increasingly spontaneous spoken interactions. Students will develop their skills in listening, speaking, reading, and writing through using language learning strategies for understanding texts and communicating clearly. They will also increase their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

## Grade 11 Core French (University Preparation

- FSF 3U)

Prerequisite: Core French, Grade 10, Academic (FSF 2D)
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.

## Grade 12 Core French (University Preparation

 - FSF 4U)Prerequisite: Core French, Grade 11, University (FSF 3U)
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.

## IMMERSION FRENCH

The French Immersion program offers you an opportunity to develop second language fluency to a level at which you can easily participate in conversation and discussion, understand the culture and institutions of French Canada and the French-speaking world, and live and work in a Francophone community with minimal adjustment.

You will complete a minimum of 10 courses in which the language of the classroom is French:

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :---: | :---: | :---: | :---: |
| FIF1D <br> French <br> Immersion <br>  <br> Literature) | FIF2D <br> French <br> Immersion <br>  <br> Literature) | FIF3U <br> French <br> Immersion <br>  <br> Literature) | FIF4U <br> French <br> Immersion <br>  <br> Literature) |
| CGC1DF <br> Issues in <br> Canadian <br> Geography | CHC2DF <br> Canadian <br> History Since <br> World War I | HSP3UF <br> Introduction to <br> Anthropology, <br> Psychology, <br> and Sociology |  |
| MPM1DF <br> Principles of <br> Mathematics | CHV2OF <br>  <br> Citizenship |  |  |
|  | GLC2OF <br> Career <br> Studies |  |  |
|  | MPM2DF <br> Principles of <br> Mathematics |  |  |

Co-operative Education with a French work placement is also available for senior students.

To be successful in French Immersion, whenever possible you should find opportunities to practise French outside of the classroom by watching French media, reading French books and magazines, communicating with Francophones, and by travelling in Francophone areas.

## A Certificate of French Immersion Studies is awarded at graduation to each student who completes a full French Immersion program.

## Grade 9 French Immersion

(Academic - FIF1D)
Prerequisite: Minimum of 3800 hours of French instruction, or equivalent.
This course provides opportunities for students to speak and interact in French independently in a variety of real-life and personally relevant contexts. Students will develop their skills in listening, speaking, reading, and writing, as well their ability to communicate in French with confidence, by using language learning strategies introduced in the elementary French Immersion program. Students will enhance their knowledge of the French language through the study of French Canadian literature. They will also increase their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

## Grade 9 Issues in Canadian Geography (Academic - CGC1DF)

Prerequisite: Minimum of 3800 hours of French instruction, or equivalent.
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. *In this course, French is the language of instruction, production, and interaction.

## Grade 9 Principles of Mathematics (Academic - MPM1DF)

Prerequisite: Minimum of 3800 hours of French instruction, or equivalent.
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.
*In this course, French is the language of instruction, production, and interaction.

## Grade 10 French Immersion (Academic FIF2D)

Prerequisite: French Immersion, Grade 9, Academic (FIF1D)
This course provides students with extensive opportunities to communicate, interact, and think critically and creatively in French. Students will use a variety of language learning strategies in listening, speaking, reading, and writing, and will respond to and interact with print, oral, visual, and electronic texts. Students will develop their knowledge of the French language through the study of contemporary French literature and historically well-known French European literature. They will also increase their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

Grade 10 Career Studies (Open - GLC2OF) Prerequisite: Minimum of 3800 hours of French instruction, or equivalent.
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 post-secondary 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.
*In this course, French is the language of instruction, production, and interaction.

## Grade 10 Civics \& Citizenship (Open CHV2OF)

Prerequisite: Minimum of 3800 hours of French instruction, or equivalent.
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.
*In this course, French is the language of instruction, production, and interaction.

## Grade 10 Canadian History since World War I

 (Academic - CHC 2DF)Prerequisite: Minimum of 3800 hours of French instruction, or equivalent.
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.
*In this course, French is the language of instruction, production, and interaction.

## Grade 10 Principles of Mathematics (Academic - MPM 2DF)

Prerequisite: Mathematics, Grade 9, Academic (MPM 1DF)
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.
*In this course, French is the language of instruction, production, and interaction.

Grade 11 French Immersion (University Preparation - FIF 3U)
Prerequisite: French Immersion, Grade 10, Academic (FIF 2D)
This course provides opportunities for students to consolidate the communication skills required to speak and interact with increasing confidence and accuracy in French in a variety of academic and social contexts. Students will use their skills in listening, speaking, reading, and writing and apply language learning strategies while exploring a variety of concrete and abstract topics. Students will increase their knowledge of the French language through the study of French literature from around the world. They will also deepen their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

## Grade 11 Introduction to Anthropology, Psychology, and Sociology (University Preparation - HSP 3UF)

Prerequisite: Canadian History, Grade 10, Academic (CHC 2DF)
This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science, and to become familiar with current thinking on a range of issues within the three disciplines.
*In this course, French is the language of instruction, production, and interaction.

Grade 12 French Immersion (University Preparation - FIF 4U)<br>Prerequisite: French Immersion, Grade 11, University (FIF 3U)<br>This course provides students with extensive opportunities to communicate, interact, and think critically and creatively in French. Students will consolidate their listening, speaking, reading, and writing skills and apply language learning strategies while communicating about concrete and abstract topics, and will independently respond to and interact with a variety of oral and written texts. Students will study a selection of French literature from the Middle Ages to the present. They will also enrich their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

## INTERNATIONAL LANGUAGES

The ability to speak two or more language greatly increases career choices and mobility. Studies prove that studying languages enhances cognitive development, reasoning and creativethinking skills. It increases the student's confidence as a learner, facilitates the learning of additional languages, and contributes to academic achievement. Second-language learners tend to be more divergent thinkers, with improved memory and attention span. Problemsolving and sound communication skills highlyvalued skills in today's global job market.

## SPANISH

Spanish, the second most widely spoken language in the world, is the official language of 21 countries and the unofficial second language of our closest neighbour and trading partner, the United States. Spoken by over 470 million people on 5 continents, Spanish is an essential language in our global economy, with Canadian business and industry rapidly expanding into Mexico, Central and South America. A functional knowledge of Spanish will improve your employability by enhancing your communicative skills and expanding your cultural awareness and understanding. Both are essential to the world of travel, government, finance, high tech, commercial and industrial job markets.

## Grade 10 Spanish (Academic - LWS BD)

Prerequisite: None
This course provides students with the language learning experiences that will enable them to communicate in Spanish. Students will develop and apply their speaking skills in a variety of contexts, and will participate in activities that will improve their reading comprehension and writing skills. They will explore aspects of the culture of countries where Spanish is spoken by taking part in activities involving both print and technological resources. Although students will expand their vocabulary and repertoire of language structures, the Spanish they will use at this level will be basic.

## Grade 11 Spanish (University Preparation LWS CU)

Prerequisite: Spanish, Grade 10, Academic (LWS BD)
This course offers students' opportunities to further develop their knowledge of Spanish and to enhance their communication skills. Students will use increasingly sophisticated language in a variety of activities that will enable them to speak and write with clarity and accuracy. Students will also enhance their thinking skills through the critical study of literature, and continue to explore aspects of the culture of countries where the language is spoken through a variety of print and technological resources.

## Grade 12 Spanish (University Preparation LWS DU)

Prerequisite: Spanish, Grade 11, University (LWS CU)
This course prepares students for university studies in Spanish. Students will enhance their ability to use the language with clarity and precision and will develop the language skills needed to engage in sustained conversations and discussions, understand and evaluate information, read diverse materials for both study and pleasure and write clearly and effectively. Students will also have opportunities to add to their knowledge of the culture of countries where the language is spoken through the use of community resources and computer technology.

## HEALTH \& PHYSICAL EDUCATION

The health and physical education (HPE) program promotes enjoyment of, and regular participation in, physical activity, and healthy active living. Students will develop: an understanding of the importance of physical fitness, health, and well-being and the factors that contribute to them; a personal commitment to daily vigorous physical activity and positive health behaviors; the skills and knowledge they require to participate in physical activities throughout their lives.

The Grade 12 university preparation course entitled Exercise Science will prepare students for university programs in physical education, kinesiology, recreation, sports administration, and health sciences.

## Health and Wellness SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).

Health and Wellness students will take:

- 4 Health and Wellness major credits
- 2 English credits
- 1 Math credit
- 1 Science or Social Science \& Humanities or Health and Physical Education credit
- 2 Co-operative Education credits to gain workplace experience that enables students to refine, extend, and practice sector specific knowledge and skills


## Possible Health and Wellness careers include:

- Apprenticeship - child development practitioner, developmental services worker, child and youth worker
- College - ambulance attendant, dental hygienist, pharmacy technician, registered nurse, athletic trainer
- University - audiologist, dentist, dietician, pharmacist, kinesiologist, sports medicine doctor
- Entry level workplace - certified personal trainer, lifeguard, hospital information clerk, medical receptionist


## Sports SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).


## Sports SHSM Students will take:

- 4 Sports major credits providing skills and knowledge in the sector
- 1 English credit
- 1 other credits tailored to include a focus on sports
- 2 cooperative education credits to gain workplace experience that enables students to refine, extend and practise sector-specific knowledge and skills

For Sports Majors, possible careers include:

- Apprenticeship - special events coordinator
- College - broadcaster, recreation facility manager
- University - sports agent, sports medicine doctor, marketing/communications manager
- Entry level workplace - recreation facilities worker, equipment manager


## Grade 9 Healthy Active Living (Open -PPL10X/10Y(X-Girls/Y-Boys)

## Prerequisite: None

This course emphasizes regular participation in a variety of enjoyable activities that promote lifelong healthy active living. Students will learn movement skills and principles, ways to improve personal fitness and physical competence, and safety and injury prevention. They will investigate issues related to healthy sexuality and the use and abuse of alcohol, tobacco, and other drugs. They will also participate in activities designed to develop goal setting, communication and social skills. A course fee may be charged for additional activities and community facilities.

## Grade 10 Personal and Fitness Activities (LiveFit - Girls) (Open - PAF2OX) Prerequisite: None

This course emphasizes regular participation in various enjoyable non-traditional activities to promote lifelong healthy active living. Students will be encouraged to develop personal competence through aerobics, fitness \& weight training, dance, self-defense, orienteering, outdoor fitness, badminton, tennis, and other recreational activities. Students will also study the components of nutrition, diet analysis, stress management and relaxation. Students will also develop personal strategies to deal effectively with relationships, sexuality, violence, and substance abuse through reports, guest speakers, and labs. A course fee for community facilities may be charged.

## Grade 10 Large Group Activities Hockey

 Focus (Open - PAL2O)Prerequisite: None
Student must choose FTEHOC to add the Hockey Program to their Course Selection
This course is a physical education program for large group activities with a focus on ice hockey. This is a skills program offered to both boys and girls following the Hockey Canada Skill Academy Program. There will be both on-ice and off-ice components and the Grade 10 Health curriculum. Grade 10 students taking this course must also take GLC201 and CHV201. Grade 11 or 12 students taking the course must select GLD201. Note: There is a course fee of $\$ 300.00$.

## Grade 10 Healthy Active Living (Open PPL2OX/2OY)

Prerequisite: None
This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Student learning will include the application of movement principles to refine skills; participation in a variety of activities that enhance personal competence, fitness and health; examination of issues related to healthy sexuality, healthy eating, substance use and abuse; and the use of informed decisionmaking, conflict resolution, and social skills in making personal choices. A course fee may be charged for additional activities and community facilities.

## Grade 11 Leadership and Peer Support (Peer Helping) (Open - GPP3O)

Prerequisite: Career Studies, Grade 10, Open (GLC2O), Interview with instructor.
This course prepares students to act in leadership roles as peer mentors and teaching assistants. Students will develop skills in communication, interpersonal relations, teamwork, and conflict management as well as time management, organization, and planning. They will then apply these skills in classroom placements working with younger students and their teachers. This course will benefit any students interested in working with people. An Interview is required.

## Grade 11 Outdoor Education (Open - PAD3O)

Prerequisite: Interview with instructor.
This is a co-ed focus course which centres on outdoor education activities to develop the Healthy Active Living concepts. This course offers students an introduction to the fundamentals of camping, canoeing, hiking, cross-country skiing, snowshoeing, swimming, orienteering, survival skills and wilderness first aid. The focus is on how to prepare for, and safely participate, in these activities and to encourage an appreciation for the outdoors and what it has to offer.
The out-of-school component of this course will involve a mandatory 5-day wilderness canoe and camping trip. The cost of the canoe/camping trip will be approximately $\$ 300.00$ plus food. A transportation fee/ facility fee for other activities may also be assessed. This course is an acceptable prerequisite for level four courses. To ensure suitability for this course, students will be interviewed before being admitted. Students will not be admitted to the course more than 4 days after the semester begins.
Note: You may take both PPL 3OX/Y and PAD3O for 2 credits.

## Grade 11 Healthy Active Living (Open PPL30X/30Y)

Prerequisite: None
This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities that have the potential to engage students' interest throughout their lives. Students will be encouraged to develop personal competence in a variety of movement skills and will be given opportunities to practice goal-setting, decision-making, social and interpersonal skills. Students will also study the components of healthy relationships, reproductive health, mental health and personal safety. A course fee may be charged for additional activities and community facilities. PPL 3OX/30Y: These are the all-female ( $X$ ) or all all-male $(Y)$ courses involving participation in the traditional recreation and sports activities, including team, group, dual and individual activities.

## Grade 11 Personal and Fitness Activities (Open - PAF3O)

Prerequisite: None
This course emphasizes regular participation in various enjoyable non-traditional activities to promote lifelong healthy active living. Students will be encouraged to develop personal competence through aerobics, fitness \& weight training, dance, self-defense, orienteering, outdoor fitness, badminton, tennis, and other recreational activities. Students will also study the components of nutrition, diet analysis, stress management and relaxation. Students will also develop personal strategies to deal effectively with relationships, sexuality, violence, and substance abuse through reports, guest speakers, and labs. A course fee for community facilities may be charged.

## Grade 12 Outdoor Adventures (Open PAD4O)

Prerequisite: Outdoor Education, Grade 11, Open (PAD3O), Interview with instructor. This course focuses on the development of leadership and coordination skills related to advanced outdoor education and other recreational activities. Students will acquire the knowledge and skills required to plan, organize, and implement recreational events. They will also learn how to promote the value of physical fitness, personal well-being, and personal safety to others through outdoor activities. The course will prepare students for college programs in recreational, leisure, and fitness leadership. The out-of-school component of this course will involve a mandatory 4 day wilderness canoe and camping trip. The cost of the canoe/camping trip will be approximately $\$ 300.00$ plus food. A transportation fee/ facility fee for other activities may also be assessed. To ensure suitability for this course, students will be interviewed before being admitted. Students will not be admitted to the course more than 4 days after the semester begins.

## Grade 12 Recreation \& Fitness Leadership (College Preparation - PLF4M)

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

## Grade 12 Large Group Activities (Open PAL4O)

Prerequisite: None
This course focuses on the development of a personalized approach to healthy active living through participation in a variety of sports and recreational activities that have the potential to engage students' interest throughout their lives. Students will develop and implement personal physical fitness plans. In addition, they will be given opportunities to refine their decisionmaking, conflict-resolution, and interpersonal skills, with a view to enhancing their mental health and their relationships with others. $A$ course fee for use of community facilities will be levied.

## Grade 12 Introductory Kinesiology (University Preparation - PSK4U)

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.
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.

## MATHEMATICS \& COMPUTER SCIENCE

The mathematics curriculum is designed to help students prepare for university, college, or the workplace by building a solid conceptual foundation in mathematics that will enable them to apply their knowledge and skills in a variety of ways and further their learning successfully. A variety of mathematics courses are offered from grade 9 to 12, and students must earn three credits to obtain the Ontario Secondary School Diploma. Mathematics plays a key role in all Specialist High Skills Major (SHSM) programs and is linked to a wide variety of placements in cooperative education programs.

Possible careers in mathematics include:

- Apprenticeship and College: Tool and Die Maker, General Carpenter, Cabinet Maker, General Machinist, Industrial Mechanical Millwright, Electrician, Auto Mechanic, Avionics Technician
- University: Mechanical/Civil Engineer, Statistician, Methodologist, Math Teacher, Architect, Aerospace Engineer, Accountant, Architectural Assistant, Senior Draftsperson, Pilot, Air Traffic Controller, Actuary, Computer Science, Systems Analyst, Insurance Agent
- Entry level workplace: Cashier, Bank Teller, Bookkeeper, Tile Setter, Building Superintendent, Flight Attendant, Sales Representative


## MATHEMATICS

## Grade 9 Foundations of Mathematics (Applied - MFM1P)

Prerequisite: None
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 reallife examples to develop various representations of linear relations, and will determine the connections between the representations. They will explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will consolidate their math skills as they solve problems and communicate their thinking.

[^0]
## Grade 9 Principles of Mathematics (Academic - MPM1D)

## Prerequisite: None

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 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 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.

## Grade 10 Foundations of Mathematics (Applied - MFM2P)

Prerequisite: Grade 9 Mathematics, Academic or Applied (MPM1D or MFM1P)
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 math skills as they solve problems and communicate their thinking.

Grade 10 Principles of Mathematics
(Academic - MPM2D)
Prerequisite: Grade 9 Mathematics, Academic (MPM1D)
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.

Grade 11 Foundations for College Mathematics (College Preparation - MBF3C) Prerequisite: Grade 10 Mathematics, Academic or Applied (MPM2D or MFM2P)
This course enables students to broaden their understanding of mathematics as a problemsolving 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; and develop their ability to reason by collecting, analyzing, and evaluating data involving one and two variables. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

## Grade 11 Functions (University Preparation MCR3U)

## Prerequisite: Grade 10 Mathematics, Academic

 (MPM2D)This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; and develop facility in simplifying polynomial and rational expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Grade 11 Functions and Applications (University/College Preparation - MCF3M)
Prerequisite: Grade 10 Mathematics, Academic or Applied (MPM2D or MFM2P)
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 financial and trigonometric applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

## Grade 11 Mathematics for Work and Everyday Life (Workplace Preparation - MEL3E)

Prerequisite: Grade 9 Mathematics, Academic or Applied (MPM1D or MFM1P) or Grade 10 Mathematics, Academic or Applied (MPM2D or MFM2P)
*** Note: offered every other year starting 2017/18***
This course enables students to broaden their understanding of math 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 in a variety of situations.
Students will consolidate their math skills as they solve problems and communicate their thinking.

## Grade 12 Foundations for College Mathematics (College Preparation - MAP4C)

Prerequisite: Grade 11 Functions and Applications (MCR3U), University/College (MCF3M) or Grade 11 Foundations for College Mathematics, College (MBF3C)
This course enables students to broaden their understanding of real-world applications of math. 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 business, health sciences, and human services, and for certain skilled trades.

## Grade 12 Mathematics for College Technology (College Preparation - MCT4C) Prerequisite: Grade 11 Functions, University (MCR3U) or Grade 11 Functions and Applications, University/College (MCF3M) 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.

## Grade 12 Calculus and Vectors (University Preparation - MCV4U)

Prerequisite: Grade 12 Advanced Functions, University (MHF4U)
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 modeling 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.

## Grade 12 Mathematics of Data Management (University Preparation-MDM4U)

Prerequisite: Grade 11 Functions, University (MCR3U) or Grade 11 Functions and Applications, University/College (MCF3M) 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 refine their use of the mathematical processes necessary for success in senior math. Students planning to enter university programs in business, the social sciences, and the humanities will find this course of particular interest.

Grade 12 Mathematics for Work and Everyday Life (Workplace Preparation - MEL4E)
Prerequisite: A credit in Grade 11 Mathematics Note: offered every other year starting 2015/16 This course enables students to broaden their understanding of math 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 housing 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.

## Grade 12 Advanced Functions (University Preparation - MHF4U)

Prerequisite: Grade 11 Functions, University (MCR3U) or Grade 12 Mathematics for College Technology, (MCT4C)
This course extends students' experience with functions. Students will investigate properties of polynomial, rational, logarithmic, and trigonometric functions; broaden their understanding of rates of change; and develop facility in applying these concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is both for students taking the Calculus and Vectors course and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs.

## COMPUTER STUDIES

The computer studies program is designed to enable students to select courses that relate to their interests and that will prepare them for further study or work in the field of their choosing. Computer studies courses are well suited for inclusion in programs that lead to a diploma with a Specialist High Skills Major designation. Whether students eventually work in the computer field or simply use computers, the computer studies program will provide them with a foundation for making informed decisions about their future plans.

Possible careers in computer studies include:

- Apprenticeship: Network Cabling Specialist, Automotive Service Technician, Information Technologist, Network/Help-Desk Technician
- College: Data Processing Assistant, Junior Help Desk Advisor, Database Developer, I.T. Support Specialist, Computer System Technician
- University: Computer Programmer, System Analyst, Network Administrator, I.T. Project Manager, Web Strategist, Internet Specialist, Network Security Officer, Computer Engineer, Network Architect, Communications Software Engineer
- Entry Level workplace: General Office Worker, Data Entry Clerk, Printing Press Operator, Special Effects Technician, Computer Support Person, Office Machine Repairer


## Grade 10 Introduction to Computer Science (Open - ICS2O)

## Prerequisite: None

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

## Grade 11 Computer Programming (College Preparation - ICS3C)

Prerequisite: None
This course introduces students to computer programming concepts and practices. Students will write and test computer programs, using various problem-solving strategies. They will learn the fundamentals of program design and apply a software development life-cycle model to a software development project. Students will also learn about computer environments and systems, and explore environmental issues related to computers, safe computing practices, emerging technologies, and postsecondary opportunities in computer-related fields.

## Grade 11 Computer Science (University Preparation - ICS3U)

Prerequisite: None
This course introduces students to computer science. Students will design software independently and as part of a team, using industry-standard programming tools and applying the software development life-cycle model. They will also write and use subprograms within computer programs. Students will develop creative solutions for various types of problems as their understanding of the computing environment grows. They will also explore environmental and ergonomic issues, emerging research in computer science, and global career trends in computer-related fields.

## Grade 12 Computer Science (University ICS4U)

Prerequisite: Introduction to Computer Science, Grade 11, University (ICS3U)
This course enables students to further develop knowledge and skills in computer science. Students will use modular design principles to create complex and fully documented programs, according to industry standards. Student teams will manage a large software development project, from planning through to project review. Students will also analyse algorithms for effectiveness. They will investigate ethical issues in computing and further explore environmental issues, emerging technologies, areas of research in computer science, and careers in the field.

## SCIENCE

Why study science? A high quality science curriculum gives students the knowledge and skills to participate in many exciting postsecondary opportunities in the science and technology. All students are required to earn two (2) science credits to graduate. However, students wishing to pursue science at the university level will be expected to take U-level courses beyond grade 10. Students considering college programs will be required to take courses at the C-level or U-level. In either case, students are strongly advised to seek help from our Guidance department regarding course requirements and minimum grade requirements for post-secondary programs you may be interested in. We also offer several M-level courses for students who may have a general interest in science but may not wish to pursue science as a career. Finally, Specialist High Skills Major (SHSM) is offered in both Healthcare and Environmental Science.

## Health and Wellness SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).


## Health and Wellness students will take:

- 4 Health and Wellness major credits
- 2 English credits
- 1 Math credit
- 1 Science or Social Science \& Humanities or Health and Physical Education credit
- 2 Co-operative Education credits to gain workplace experience that enables students to refine, extend, and practice sector specific knowledge and skills


## Possible Health and Wellness careers include:

- Apprenticeship - child development practitioner, developmental services worker, child and youth worker
- College - ambulance attendant, dental hygienist, pharmacy technician, registered nurse, athletic trainer
- University - audiologist, dentist, dietician, pharmacist, kinesiologist, sports medicine doctor
- Entry level workplace - certified personal trainer, lifeguard, hospital information clerk, medical receptionist


## Environment SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).


## The Environment SHSM students will take:

- 4 Environment major credits
- 2 English credits
- 1 Math credit
- 2 Co-operative Education credits to gain workplace experience that enables students to refine, extend, and practice sector specific knowledge and skills


## Possible Environmental careers include:

- Apprenticeship - arborist, horticultural technician
- College - conservation and fishery officer, soil testing technologist, soil ecologist
- University - environmental biologist, waste diversion consultant, environmental and occupational toxicologist, environmental engineer
- Entry level workplace - outdoor sport and recreation guide, recycled paper handler


## Grade 9 Science (Academic - SNC1D)

Prerequisite: None
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.

## Grade 9 Science (Essential - SNC1L) Prerequisite: None

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.

## Grade 9 Science (Applied - SNC1P)

## Prerequisite: None

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.

## Grade 10 Science (Academic - SNC2D)

Prerequisite: Science, Grade 9, Academic (SNC1D)
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.

## Grade 10 Science (Essential - SNC2L) <br> Prerequisite: None

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.

## Grade 10 Science (Applied - SNC2P)

Prerequisite: Science, Grade 9, Applied or Academic (SNC1P or SNC1D)
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 realworld 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.

## Grade 11 Biology (College Preparation SBI3C)

Prerequisite: Science, Grade 10, Applied or Academic (SNC2P or SNC2D)
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.

## Grade 11 Biology (University Preparation SBI3U)

Prerequisite: Science, Grade 10, Academic (SNC2D)
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.

## Grade 11 Chemistry (University Preparation SCH3U)

## Prerequisite: Science, Grade 10, Academic (SNC2D)

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 behavior 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.

## Grade 11 Physics (University Preparation SPH3U)

## Prerequisite: Science, Grade 10, Academic (SNC2D)

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

## Grade 11 Environmental Science, (Workplace Preparation-SVN3E)

Prerequisite: Science, Grade 9, Applied or Academic (SNC1P or SNC1D) or Science, Grade 9 or 10, Essential (SNC1L or SNC2L)
Note: offered every other year starting 2016/17
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.

## Grade 11 Environmental Science

 (University/College Preparation - SVN3M) Prerequisite: Science, Grade 10, Applied or Academic (SNC2P or SNC2D)This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in life after secondary school. Students will explore a range of topics, including the role of science in addressing contemporary environmental challenges; the impact of the environment on human health; sustainable agriculture and forestry; the reduction and management of waste; and the conservation of energy. Students will increase their scientific and environmental literacy and examine the interrelationships between science, the environment, and society in a variety of areas.

## Grade 11 Health Care (University/College Preparation - TPJ3M)

Prerequisite: None
This course enables students to develop their understanding of basic health care procedures, including the safe use of appropriate instruments, equipment, and materials. Students will focus on health care fundamentals, including the anatomical features and physiology of the major body systems and the factors that affect homeostasis in the human body. Students will develop an awareness of health and safety issues in the healthcare field, analyze environmental and societal issues related to health care, and learn about professional practice standards and career opportunities in the field.

## Grade 12 Biology (University Preparation SBI4U)

Prerequisite: Biology, Grade 11, University (SBI3U)
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.

## Grade 12 Chemistry (College Preparation SCH4C)

Prerequisite: Science, Grade 10, Applied or Academic (SNC2P or SNC2D)
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.

## Grade 12 Chemistry (University Preparation SCH4U)

Prerequisite: Chemistry, Grade 11, University (SCH3U)
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.

## Grade 12 Earth and Space Science (University Preparation-SES4U) <br> Prerequisite: Science, Grade 10, Academic (SNC2D)

This course develops students' understanding of Earth and its place in the universe. Students will investigate the properties of and forces in the universe and solar system and analyze techniques scientists use to generate knowledge about them. Students will closely examine the materials of Earth, its internal and surficial processes, and its geological history, and will learn how Earth's systems interact and how they have changed over time. Throughout the course, students will learn how these forces, processes, and materials affect their daily lives. The course draws on biology, chemistry, physics, and mathematics in its consideration of geological and astronomical processes that can be observed directly or inferred from other evidence.

## Grade 12 Science (Workplace Preparation SNC4E)

Prerequisite: Science, Grade 10, Applied or Academic (SNC2P or SNC2D)
*** Note: offered every other year starting 2017/18***
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.

Grade 12 Science (University/ College Preparation - SNC4M)
Prerequisite: Science, Grade 10, Applied or Academic (SNC2P or SNC2D)
This course enables students, including those pursuing post-secondary programs outside the sciences, to increase their understanding of science and contemporary social and environmental issues in health-related fields. Students will explore a variety of medical technologies, pathogens and disease, nutritional science, public health issues, and biotechnology. The course focuses on the theoretical aspects of the topics under study and helps refine students' scientific investigation skills.

## Grade 12 Physics (College Preparation SPH4C)

Prerequisite: Science, Grade 10, Applied or Academic (SNC2P or SNC2D)
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.

## Grade 12 Physics (University Preparation SPH4U)

Prerequisite: Physics, Grade 11, University (SPH3U)
This course enables students to deepen their understanding of physics concepts and theories. Students will continue their exploration of energy transformations and the forces that affect motion, and will investigate electrical, gravitational, and magnetic fields and electromagnetic radiation. Students will also explore the wave nature of light, quantum mechanics, and special relativity. They will further develop their scientific investigation skills, learning, for example, how to analyze, qualitatively and quantitatively, data relating to a variety of physics concepts and principles. Students will also consider the impact of technological applications of physics on society and the environment.

## TECHNOLOGICAL EDUCATION

Technological innovation influences all areas of life, from the daily lives of individuals to the work of business and government, to interactions on a global scale. It helps meet basic human needs and provides tools for improving people's lives and exploring new frontiers. The policy outlined in this document is designed to ensure that technological education in Ontario enables students to meet the challenges and opportunities of the twenty-first century.

## Agriculture SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).


## Agriculture SHSM students will take:

- 4 Agriculture major credits
- 1 English credit
- 1 Math credit
- 1 credit of either Science or Business Studies
- 2 Co-operative Education credits to refine, extend, and practice sector specific knowledge and skills


## What are the future career paths for an agriculture major?

- Apprenticeship - Saddlery, Horse Groom, Agricultural Equipment Technician,
- College - Farmer and Farm Manager, Technical Sales Specialist, Winery and Viticulture Technician
- University - Agricultural Chemist, Agricultural Inspector, Agronomist, Soil Scientist, Veterinarian
- Entry-level workplace - General Farm Worker, Greenhouse Worker, Harvesting Labourer, Pet Groomer and Animal Care Worker, Specialized Livestock Worker


## Construction SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).


## Construction SHSM students will take:

- 4 construction major credits
- 1 English credit
- 1 Math credit
- 1 credit of either Science or Business Studies
- 2 Co-operative Education credits to refine, extend, and practice sector specific knowledge and skills


## What are the future career paths for a construction major?

- Apprenticeship - Brick and Stone Mason, Carpenter, Construction Millwright, Electrician, Heating and Air Conditioning Contractor, Painter and Decorator, Plumber, Roofer 7291
- College - Architectural Design Technician/Technologist, Civil Engineering Technologist, Construction Estimator, Construction Manager, Construction Technologist, Contractor and Supervisor, Electrical Trades and Telecommunications, Home Inspector, Interior Designer, Residential Home Builder or Renovator
- University - Architect, Electrical Engineer, Mechanical Engineer, Structural Engineer
- Entry-level workplace - Carpenter Helper, Concrete Finisher, Construction Trades Helper and Labourer, Demolition Worker, Drywall Installer, Helper - Construction Trades, Home Renovator


## Hospitality SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).

Hospitality SHSM students will take:

- Four Hospitality and tourism major credits
- 1 English credit
- 1 Math credit
- 1 credit of either Science or Business Studies
- 2 Co-operative Education credits to refine, extend, and practice sector specific knowledge and skills


## What are the future career paths for a hospitality and tourism major?

- Apprenticeship - baker, cook, chef, retail meat cutter, institutional cook, special events coordinator
- College - flight attendant, food service manager
- University - nutritionist, dietician, hotel manager
- Entry-level workplace - hotel valet, bartender, server


## Manufacturing SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).


## Manufacturing SHSM students will take:

- 4 Manufacturing major credits
- 1 English credit
- 1 Math credit
- 1 Science credit
- 2 Co-operative Education credits to refine, extend, and practice sector specific knowledge and skills


## Possible manufacturing careers include:

- Apprenticeship - precision machinist, tool and die maker, welder, electrician
- College - design and drafting technologist, inventory analyst, engineering technologist
- University - mechanical engineer, electrical engineer, metallurgical engineer
- Entry-level workplace - machine operator, foundry worker, inventory clerk


## Transportation SHSM

- SHSM is for Grade 11 and 12 students who are heading to an apprenticeship, college, university or the workplace and who want to identify, explore and refine their career goals and make informed choices about their next steps after secondary school.
- SHSM lets students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD).


## Transportation SHSM students will take:

- Four Transportation major credits
- 1 English credit
- 1 Math credit
- 1 credit of either Science or Business Studies
- 2 Co-operative Education credits to refine, extend, and practice sector specific knowledge and skills


## Possible Transportation careers include:

- Apprenticeship -Alignment and Brakes

Technician, Auto Body Repairer, Automotive Painter, Motor Vehicle Repair, Automotive Service Technician, Marine Engine Mechanic, Motorcycle Technician, Recreation Vehicle Service Technician, Small Engine Mechanic, Truck and Coach Technician

- College -Air Pilot, Industrial Designer, Marine Engine Technician, Mechanical Engineering Technologist, Navigation Officer - Water Transport, Automotive/Marine Engines
- University - Aerospace Engineer, Automotive Engineer, Industrial Designer, Urban Planner
- Entry-level workplace -Aircraft Assembler and Aircraft Assembly Inspector, Automobile Salesperson, Automotive Mechanical Installers and Servicers, Boat Assembler and Inspector, Boat Operator, Bus Driver, Subway Operator, and Other Transit Operator, Delivery and Courier Service Drivers, Heavy Equipment Operators (except Crane), Tire Repairer


## INTEGRATED TECHNOLOGY

Grade 9 Integrated Technologies (Open TIJ1O)<br>Prerequisite: None<br>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 course will be divided into two terms. One term will focus on hospitality and careers, the second term will focus on manufacturing, construction, transportation and design.

## COMPUTER TECHNOLOGY

## Grade 9 Exploring Computer Technology (Open - TEJ1O) <br> Prerequisite: None <br> This exploratory course introduces students to concepts and skills in computer technology, including computer systems, information technology, networking, electronics and programming. Students will develop an awareness of related environmental and societal issues and will begin to explore secondary and postsecondary pathways leading to careers in this much sought after field.

## Grade 11 Computer Engineering Technology (University/College Preparation - TEJ3M) Prerequisite: None

This course examines information technology, electronics design, networking and coding. Students will assemble computers and small networks by installing and configuring appropriate hardware and software. Students will develop knowledge and skills in electronics, 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 information technology and computer engineering.

## Grade 11 Computer Engineering Technology (Workplace Preparation - TEJ3E)

## Prerequisite: None

This course enables students to develop knowledge and skills related to computer hardware, networks, operating systems, and other software. Students will use utility and application software, and learn proper procedures for installing, maintaining, and troubleshooting computer systems and networks. Students will develop an awareness of environmental and societal issues related to the use of computers, and will learn about apprenticeships and other employment opportunities in the field of computer technology that they may choose to pursue after graduation.

## Grade 11 Software Engineering Technology (University/College Preparation - TGI3M)

 Prerequisite: NoneUsing industry standard software engineering processes, students will work in a team environment developing video game and application coding. This course focuses on hands on coding and makes use of 3d modeling and other game design software in order to produce a class build that will is published under the students' names at the end of the course. Grade 11 students will develop specific skills in code integration and management that will allow them to experience industry best practices in this extremely in-demand field.

## Grade 12 Computer Engineering Technology (University/College Preparation- TEJ4M)

 Prerequisite: Grade 11, Computer Engineering Technology, (University/ College, TEJ3M) 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.
## Grade 12 Software Engineering Technology (University/College Preparation - TGI4M)

Prerequisite: Grade 11, Software Engineering, (University/ College, TGI3M)
The senior students in this software engineering course take on the role of team and project leads. While continuing to sharpen their hand at coding they will also develop team management and leadership skills commonly found in the software industry. As team leads they are also instrumental in authoring the direction of this course's software project. Students will gain valuable experience that will allow them to quickly integrate into post-secondary and industry software engineering processes.

## CONSTRUCTION

## Grade 10 Construction Technology (Open TCJ2O)

## Prerequisite: None

This course introduces students to building materials and processes through opportunities to design and build various construction projects. Students will learn to create and read working drawings; become familiar with common construction materials, components, and processes; and perform a variety of fabrication, assembly, and finishing operations. They will use a variety of hand and power tools and apply knowledge of imperial and metric systems of measurement, as appropriate. Students will develop an awareness of environmental and societal issues related to construction technology, and will explore secondary and postsecondary pathways leading to careers in the industry.

## Grade 11 Construction Technology (Workplace Preparation - TCJ3E)

Prerequisite: None
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, layout, 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.

## Grade 11 Custom Woodworking (Workplace Preparation - TWJ3E)

Prerequisite: None

This 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.

## Grade 12 Construction Technology (Workplace Preparation - TCJ 4E) Prerequisite: Grade 11, Construction Technology (Workplace, TCJ3E)

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

[^1]
## HOSPITALITY

## Grade 9 Hospitality and Tourism Technology (Open - TFJ1O) <br> Prerequisite: None <br> This exploratory course introduces students to concepts and skills related to hospitality and tourism, focusing on the areas of food handling, food preparation, the origins of foods, event planning, and local tourism. Students will develop an awareness of related environmental and societal issues and will begin to explore secondary and postsecondary pathways leading to careers in the field.

## Grade 10 Hospitality and Tourism Technology (Open - TFJ2O)

Prerequisite: None
This course provides students with opportunities to explore different areas of hospitality and tourism, as reflected in the various sectors of the tourism industry, with an emphasis on food service. Students will study culinary techniques of food handling and preparation, health and safety standards, the use of tools and equipment, the origins of foods, and event planning, and will learn about tourism attractions across Ontario. Students will develop an awareness of related environmental and societal issues and will explore secondary and postsecondary pathways leading to careers in the tourism industry.

## Grade 11 Hospitality and Tourism (Workplace

 - TFJ3E)Prerequisite: None
This course enables students to acquire knowledge and skills related to the food and beverage services sector of the tourism industry. Students will learn how to prepare, present, and serve food using a variety of tools and equipment and will develop an understanding of the fundamentals of providing high quality service to ensure customer satisfaction and the components of running a successful event or activity. Students will develop an awareness of health and safety practices, environmental and societal issues, and career opportunities in the food and beverage services sector.

## Grade 11 Hospitality and Tourism (College TFJ3C)

Prerequisite: None
This course enables students to develop or expand knowledge and skills related to hospitality and tourism, as reflected in the various sectors of the tourism industry. Students will learn about preparing and presenting food, evaluating facilities, controlling inventory, and marketing and managing events and activities, and will investigate customer service principles and the cultural and economic forces that drive tourism trends. Students will develop an awareness of health and safety standards, environmental and societal issues, and career opportunities in the tourism industry.

## Grade 12 Hospitality and Tourism (Workplace - TFJ4E)

Prerequisite: Grade 11, Hospitality and Tourism, (TFJ3E)
This course enables students to further develop knowledge and skills related to the food and beverage services sector of the tourism industry. Students will demonstrate proficiency in using food preparation and presentation tools and equipment; plan nutritious menus, create recipes, and prepare and present finished food products; develop customer service skills; and explore event and activity planning. Students will expand their awareness of health and safety practices, environmental and societal issues, and career opportunities in the food and beverage services sector.

## MANUFACTURING

## Grade 9 Exploring Manufacturing Technology

 (Open - TMJ1O)Prerequisite: None
This exploratory course introduces students to concepts and skills related to manufacturing technology, which encompasses technical drawing, properties and preparation of materials, manufacturing techniques, and control systems.
Students will develop an awareness of related environmental and societal issues and will begin to explore secondary and postsecondary pathways leading to careers in the field.

## Grade 10 Manufacturing Technology (Open TMJ2O) <br> Prerequisite: None

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.

## Grade 11 Manufacturing Technology (Workplace - TMJ3E)

Prerequisite: None
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.

## Grade 11 Manufacturing Technology (College - TMJ3C) <br> Prerequisite: None

This course enables students to develop knowledge and skills through hands-on, projectbased learning. Students will acquire design, fabrication, and problem-solving skills while using tools and equipment such as lathes, mills, welders, computer-aided machines, robots, and control systems. Students may have opportunities to obtain industry-standard certification and training. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about pathways leading to careers in the industry.
Grade 12 Manufacturing Technology(Workplace Preparation - TMJ4E)Prerequisite: Grade 11 ManufacturingTechnology, (Workplace TMJ3E)This project-driven, hands-on course builds onstudents' 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.

## Grade 12 Manufacturing Technology (College Preparation - TMJ4C)

Prerequisite: Grade 11 Manufacturing Technology, (College TMJ3C)
This course enables students to further develop knowledge and skills related to machining, welding, print reading, computer numerical control (CNC), robotics, and design. Students will develop proficiency in using mechanical, pneumatic, electronic, and computer control systems in a project-based learning environment and may have opportunities to obtain industrystandard training and certification. Students will expand their awareness of environmental and societal issues and career opportunities in the manufacturing industry.

## TECHNOLOGY DESIGN

## Grade 10 Technological Design (Open TDJ2O)

## Prerequisite: None

Do you like to draw? Do you like to build? This course is for you! Take drawing to new heights in AutoCAD and 3D modeling programs such as Google Sketch Up. Learn how to create objects and systems that can be manufactured or constructed using electronics, pneumatics, gears and pulleys. The units in the course focus on technical drawing, 3D Modeling and Printing, the Design Process, Structures, and Motion. The final summative is a choice of five options, all geared to diverse interests. All want-to-be architects, engineers, artists, stage designers, robot technicians or game designers are welcome. No drawing experience or computer experience required.

## Grade 11 Technological Design and the Environment (Open - TDJ3O)

Prerequisite: None
Are you interested in the environment? Are you interested in design? This course explores industrial, mechanical, architectural, and apparel design with an emphasis on human and environmental challenges. Learn the design process, and develop an idea from its inception, to its computer model, to its physical
presence. Enjoy experimentation and the design process. Learn how to communicate these environmentally friendly designs through proposals, reports, drawings, models and presentations.

## Grade 11 Technological Design (University/College Preparation - TDJ3M)

 Prerequisite: NoneHave you ever wanted to design your own dream home or craft your own automobile? Or maybe 3D computer animation interests you? Extend your skills in 3D Modeling and Systems engineering to design and create. Learn drawing conventions to get your designs to manufacturing. Oh, and we also examine how technological design is influenced by human, environmental, financial and material requirements, all while making some pretty cool projects. The final summative is a choice of three projects or one you can propose. No drawing experience or computer experience required.

## Grade 12 Technological Design <br> (University/College Preparation - TDJ4M)

 Prerequisite: Grade 11 Technological Design, (University/College TDJ3M)This course introduces students to the fundamentals of design advocacy and marketing, while building on their design skills and their knowledge of professional design practices. Students will apply a systematic design process to research, design, build, and assess solutions that meet specific human needs, using illustrations, presentation drawings, models, animations and presentation tools to present their designs. Students will enhance their problemsolving and communication skills. Final projects and some course projects are geared toward student interests.

## Grade 11 Robotics and Control Systems

 (University/College - TMR3M)Prerequisite: None
Students will walk through the design and build a mobile robot to play a sport-like game using the VEX Robotics system. During this process they will learn key STEM principles, and robotics concepts. At the culmination of this class, they will compete head-to-head against their peers in the classroom, and maybe make it to the world stage in the VEX Robotics Competition, the largest and fastest growing international robotics competition for middle and high school students.

## Grade 12 Robotics and Control Systems

 (University/College Preparation - TMR4M) Prerequisite: Grade 11 Robotics, (University/College TMR3M)Students will continue their learning with the VEX Robotics system and Arduinos to become a robot builder and solve a problem posed by Ontario Skills Competition. They will continue to learn key STEM principles, and robotics concepts. At the culmination of this class, they will compete head-to-head against their peers in the classroom, and maybe make it to the Ontario stage in the Skills Competition held at RIM Park.

## TRANSPORTATION

## Grade 10 Transportation Technology (Open TTJ2O)

Prerequisite: None
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.

## Grade 10 Transportation Technology, Small Engines (Open - TTJ 201) <br> Prerequisite: None

This course introduces students to the service and maintenance of small engines and 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, electrical/ battery service, and proper 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.

## Grade 11 Transportation Technology, Auto Service (College Preparation - TTA 3C1 and TTA3C2)

Prerequisite: None
Recommended: Grade 10, Transportation
Technology, (Open TTJ20)
Note: Must take both TTA3C1 and TTA3C2
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. Students will develop communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will develop an awareness of environmental and societal issues related to transportation and will learn about apprenticeship and college programs leading to careers in the transportation industry. This is a two-credit course designed for Specialist High Skills Major students.

[^2]Grade 11 Transportation Technology, Small Engines (College Preparation - TTS3C) Prerequisite: None<br>Recommended: Grade 10, Transportation Technology, Small Engines, (Open TTJ2O1) This course enables students to develop technical knowledge and skills as they study, test, service, and repair engine, electrical, suspension, and steering systems on small engines 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.

## Grade 12 Transportation Technology-Auto Service, (College Preparation - TTA4C1 and TTA4C2)

Prerequisite: Grade 11, Transportation Technology (College - TTA3C)
Note: Must take both TTA4C1 and TTA4C2 This course enables students to further develop technical knowledge and skills as they study, test, service, and repair engine management systems; powertrains; 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. This course will focus on electrical diagnosis, wiring diagrams, and electrical fuel injection relevant to the auto service industry.

## Grade 12 Transportation Technology

(Workplace Preparation - TTJ4E)
Prerequisite: Grade 11, Transportation
Technology, (Open TTJ3E)
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.


[^0]:    Grade 9 Mathematics (Essential - MAT1L) Prerequisite: None This course emphasizes further development of mathematical knowledge and skills to prepare students for success in their everyday lives and in the workplace. 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 math concepts and skills by solving authentic, everyday problems. Students have opportunities to further develop their math literacy and problem-solving skills and to continue developing skills in reading, writing, and oral language through relevant and practical math activities.

[^1]:    Grade 12 Custom Woodworking (Workplace Preparation - TWJ4E)
    Prerequisite: Custom Woodworking, Grade 11, (Workplace, TWJ3E)
    This 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.

[^2]:    Grade 11 Transportation Technology: Vehicle Ownership (Open - TTJ3O)
    Prerequisite: None
    Recommended: Grade 10, Transportation Technology, (Open TTJ20)
    This general interest course enables students to become familiar with the options and features of various vehicles, issues of registration, and the legal requirements affecting vehicle owners. Students will also learn about vehicle financing and insurance, vehicle maintenance, emergency procedures, and the responsibilities of being a vehicle owner. Students will develop an awareness of environmental and societal issues related to vehicle ownership and use, and will explore career opportunities in the transportation industry.

