

HALIBURTON HIGHLANDS SECONDARY SCHOOL



2018/2019 COURSE CALENDAR

TABLE OF CONTENTS

Diploma Requirements	2
Community Involvement Activities	3
The Provincial Secondary School Literary Test	4
Substitutions for Compulsory Courses	4
The Ontario Secondary School Certificate	4
Credit	5
Types of Courses in Grades 9 and 10	5
Types of Courses in Grades 11 and 12	5
Course Changes	6
Evaluation and Examinations	6
Student Records and the Ontario Student Transcript	6
Full Disclosure on Transcript of All Courses Attempted	6
Credit Recovery	7
Special Education Services	7
Exceptional Students	7
Guidance Services	7
HHSS Library	8
Guidelines for Post-Secondary Admissions	9
Extended French Program	9
Specialist High Skills Major	9
Dual Credits	10
Student Success	10
School Credo	10
Student Evaluation and Examinations	10
Attendance Policy	10
Code of Behaviour	10
Changing Course Types	11
Distance Education	11
The Virtual Learning Centre (VLC)	11
Night School	11
Summer School	12
Cooperative Education	12
Ontario Youth Apprenticeship Program	12
Prior Learning Assessment and Recognition (P.L.A.R.)	12
COURSE DESCRIPTIONS	
Arts	13
Business Studies	17
Computer and Information Science	17
English	17
Family Studies	20
French	20
Geography	22
Guidance/Co-operative Education	24
History	25
Interdisciplinary Studies	28
Mathematics	29
Healthy Active Living Education	32
Science	34
Technological Studies	37

GENERAL INFORMATION

DIPLOMA REQUIREMENTS

The following 18 courses are compulsory:

- 4 English (one in each grade)
- 3 Math (one at grade 11 or 12)
- 2 Science
- 1 Arts credit
- 1 French
- 1 Canadian Geography
- 1 Canadian History
- 1 Physical and Health Education
- 1 half credit in Careers
- 1 half credit in Civics

PLUS:

3 Additional credits, consisting of 1 credit from each of the following groups:

Group 1: English or French as a second language, a Native language, a classical or international language, social sciences and the humanities, Canadian and world studies, guidance and career education, cooperative education.

Group 2: French as a second language, the arts, business studies, health and physical education, cooperative education.

Group 3: French as a second language, science (Grade 11 or 12), computer studies, technological education, cooperative education.

Note: The following conditions apply to selections from the above three groups:

- A maximum of 2 credits in French as a second language may count as additional compulsory credits, one credit from Group 1, and one credit from either Group 2 or Group 3.
- A maximum of 2 credits in cooperative education may count as additional compulsory credits, selected from any of Groups 1, 2, or 3.

FREQUENTLY ASKED QUESTIONS

Q: What is a credit?

A: A means of recognition of the successful completion of a course for which a minimum of 110 hours has been scheduled. A credit is granted by the Principal on behalf of the Minister.

Q: How do I know what is being taught in a course?

A: The detailed course outlines as described are at the school and available for perusal by students, parents, or guardians. Each course, unless otherwise noted, represents one full credit.

Q: How do I interpret a course code?

A: Most of the course codes in this booklet contain 5 or 6 characters. For example: ENG2PR or MEL3ER.

The first three characters denote the subject and course group. ENG is English, MEL is Math for Everyday Life. The fourth character denotes grade level, 2 is grade 10 or second year, 3 is grade 11 and so on. The fifth character indicates the level of study as follows:

O	Open
D	Academic
P	Applied
L	Locally Developed
U	University Preparation
M	University/College Preparation
C	College Preparation
E	Workplace Preparation

Where there is a sixth character it may denote the number of credits the course is worth or the specific subject matter.

Q: Why are courses cancelled?

A: The presentation of any course described in this book is subject to two conditions:

1. There must be a teacher on staff who is able to teach the course.
2. There must be sufficient enrolment.

Q: What if I change my mind after my option sheet is in?

A: Make firm choices. Research and choose the proper courses. It is often difficult to make changes once classes have begun. If a change is absolutely necessary, see a guidance counsellor immediately. All changes are subject to availability and number of students enrolled in the class.

Q: How do I report to the school that I've completed my forty community service hours?

A: Students need to pick up a Completion of Community Involvement Activities record card from the Guidance Office. The card needs to be filled out as service hours are completed and then returned to the Guidance Office.

Q: How can I find out how my work will be evaluated?

A: Teachers will provide students with evaluation outlines for each course.

Q: What are the expectations at HHSS with regard to behaviour and attendance?

A: Students are expected to attend all classes and behave in a respectful manner. Details with regards to these expectations can be found in the school's Student Handbook available on our website.

COMMUNITY INVOLVEMENT ACTIVITIES

As part of the diploma requirements, students must complete a minimum of 40 hours of community involvement activities. These activities may be completed at any time during their years in the secondary school program.

Community involvement activities may take place in a variety of settings, including businesses, not-for-profit organizations, public sector institutions (including hospitals), and informal settings. Students may **not** fulfil the requirement through activities that are counted towards a credit (co-operative education and work experience, for example), through paid work, or by assuming duties normally performed by a paid employee.

The Community Involvement requirement is designed to encourage students to develop awareness and understanding of civic responsibility and of the role that they can play in supporting and strengthening their communities. Students and their parents are responsible for maintaining records in this program. (Please contact the Guidance Office or visit the HHSS website for more information.) Submit completed hour cards to the Guidance Office.

The requirement is to be completed outside students' normal instructional hours - that is, the activities are to take place in students' designated lunch hours, after school, on weekends, or during school holidays.

THE PROVINCIAL SECONDARY SCHOOL LITERACY TEST

All students must successfully complete the provincial secondary school literacy test in order to earn a secondary school diploma. Students will take the literacy test when they are in Grade 10. The test will be based on the Ontario curriculum expectations for language and communication - particularly reading and writing - up to and including Grade 9.

Students will write the test during the spring of their Grade 10 year. Students who are not successful will have an opportunity to retake the test. Students who do not pass the test after two attempts must successfully complete the Grade 12 Literacy course in order to obtain a diploma.

Provincial regulations allow for students to receive accommodations when writing the test, to defer the test to a later date or be exempted under special circumstances. Please contact Bruce Griffith in the Special Education Department for details about these policies.

SUBSTITUTIONS FOR COMPULSORY COURSES

In order to allow flexibility in designing a student's program and to ensure that all students can qualify for the secondary school diploma, substitutions may be made for a limited number of compulsory credit courses using courses from the remaining courses offered by the school that meet the requirements for compulsory credits. To meet individual students' needs, principals may replace up to three of these courses (or the equivalent in half courses) with courses from the remainder of those that meet the compulsory credit requirements. In all cases, however, the sum of compulsory and optional credits will not be less than thirty for students aiming to earn the Ontario Secondary School Diploma and not less than fourteen for those aiming to earn the Ontario Secondary School Certificate.

THE ONTARIO SECONDARY SCHOOL CERTIFICATE

The Ontario Secondary School Certificate (OSSC) will be granted, on request, to students who are leaving secondary school upon reaching the age of eighteen without having met the requirements for the Ontario Secondary School Diploma. To be granted an OSSC, a student must have earned a minimum of 14 credits, distributed as follows.

Compulsory credits (total of 7)

2 credits in English

1 credit in Canadian Geography or Canadian History

1 credit in Mathematics

1 credit in Science

1 credit in Physical and Health Education

1 credit in the Arts or Technological Education or Computer Technology

Optional credits (total of 7)

7 credits selected by the student from available courses

Students who are leaving secondary school upon reaching the age of eighteen without having met the requirements for the Ontario Secondary School Diploma or the Ontario Secondary School Certificate may be granted a Certificate of Accomplishment. The Certificate of Accomplishment may be a useful means of recognizing achievement for students who plan to take certain kinds of further training, or who plan to find employment directly after leaving school. The Certificate of Accomplishment is to be accompanied by the student's Ontario Student Transcript. For students who have an Individual Education Plan (IEP), a copy of the IEP may be included.

CREDIT

A credit is granted when a course of at least 110 hours (that is, a regular full-year or full-semester course) is completed successfully. A partial credit may be granted for a shorter course.

TYPES OF COURSES IN GRADES 9 AND 10

Academic and applied courses set high expectations for all students.

ACADEMIC COURSES (D) focus on the essential concepts of the discipline and also explore related concepts. Academic courses develop students' knowledge and skills by emphasizing theoretical, abstract applications of the essential concepts and incorporating practical applications as appropriate.

APPLIED COURSES (P) also focus on the essential concepts of the discipline, but develop students' knowledge and skills by emphasizing practical, concrete applications of these concepts and incorporating theoretical applications as appropriate. Academic and applied courses differ in the balance between essential concepts and additional material, and in the balance between theory and application.

OPEN COURSES (O), offered in all secondary school grades, are designed to prepare students for further study in certain subjects and to enrich their education generally. Like the other types of courses, open courses are credit-based and are counted towards the 30 credits required to meet diploma requirements.

LOCALLY DEVELOPED COURSES (L) provide students with the knowledge and skills for continuation in the workplace pathway.

TYPES OF COURSES IN GRADES 11 AND 12

The five types of courses in Grades 11 and 12 are defined as follows:

UNIVERSITY PREPARATION COURSES (U) are designed to equip students with the knowledge and skills they need to meet the entrance requirements for university programs.

UNIVERSITY/COLLEGE PREPARATION COURSES (M) are designed to equip students with the knowledge and skills they need to meet the entrance requirements for specific programs offered at universities and colleges.

COLLEGE PREPARATION COURSES (C) are designed to equip students with the knowledge and skills they need to meet the requirements for entrance to most college programs or for admission to apprenticeship or other training programs.

WORKPLACE PREPARATION COURSES (E) are designed to equip students with the knowledge and skills they need to meet the expectations of employers, if they plan to enter the workplace directly after

graduation, or the requirements for admission to certain apprenticeship or other training programs. These courses can also be used towards college, but check with your Counsellor.

OPEN COURSES (O) are designed to broaden students' knowledge and skills in subjects that reflect their interests and to prepare them for active and rewarding participation in society. They are not designed with the specific requirements of universities, colleges, or the workplace in mind.

Prerequisites are specified for many of the courses offered in Grades 11 and 12. They are identified in the course descriptions in this calendar.

Outlines of courses of study are available in the secondary school offices. Please contact the principal. The courses offered are developed according to the requirements of the Ontario Ministry of Education and Training.

All course outlines are available for viewing. Please contact the school.

COURSE CHANGES

Policy regarding course changes is to be found in the Student Handbook. All course changes for students are done through the guidance office and must have parental/guardian consent for students under the age of 18.

EVALUATION AND EXAMINATIONS

Students receive a course outline and evaluation policy for each course from their subject teacher. This information is to be brought home for parent/guardian signatures.

STUDENT RECORDS AND THE ONTARIO STUDENT TRANSCRIPT

An Ontario Student Record file is maintained in the school for each secondary school student.

Students' report cards are kept in this file, along with an Ontario Student Transcript. The Ontario Student Transcript lists all courses that the student has successfully completed, marks and the credits obtained in grades 9 and 10. All attempts at grade 11 and 12 courses, marks and the credits obtained will also be listed. The Ontario Student Transcript will show the successful completion of the Grade 10 Test of Reading and Writing, and the 40 hours of Mandatory Community Involvement.

Students and parents have a right to view the Student's Record upon request. The purpose of the Ontario Student Transcript is to provide students, parents, postsecondary institutions and employers with a common record of student achievement.

FULL DISCLOSURE ON TRANSCRIPT OF ALL COURSES ATTEMPTED

The Ontario Student Transcript will record:

- Successful credits earned in grades 9 and 10
- All grade 11 and 12 credits (courses) attempted (successfully or unsuccessfully)

CREDIT RECOVERY

“Credit Recovery” is a process whereby students can recover the credit for a course which was failed, in less than the 110 hours required to repeat the whole course. Credit recovery focuses not on time, but on what key learnings the student must attain before earning the credit. “Courses for which credits are being recovered” refers to the individual curriculum course which the student has previously failed, and in which the student is trying to recover a credit by meeting the curricular expectations established by the principal. The principal will grant a credit when he/she is assured that the student has satisfactorily achieved the curriculum expectations for the course which the credit is being recovered.

SPECIAL EDUCATION SERVICES

Special education consists of staff, programs, services, and resources, which will help to support students, identified as exceptional, to reach their potential in their chosen courses. In co-operation with subject teachers, special education staff can provide support in a variety of ways including:

- Regular class with monitoring
- Learning Strategies Courses – study skills, subject course support and building independence (maximum 4 credits).
- Learning Centre Support (no credit)
- Practical Academic Life Skills for extreme needs (credit value determined by accomplishment of expectations). Sometimes students in these courses will achieve subject accomplishments, rather than credits.

These programs are made available to students as a result of the recommendation of an I.P.R.C. (Identification, Placement and Review Committee), the in-school problem solving committee or the principal. Our long-term goal is to have students develop independence, self-advocacy skills, and understanding of their individual learning profile.

EXCEPTIONAL STUDENTS

Students identified by the Board as exceptional will be monitored by the Special Education/Student Services Department to ensure that the expectations of their programs are being satisfied and that any special equipment necessary is made available. Please contact the Special Education/Student Services Department Head at your son’s/daughter’s school for more specific information.

Trillium Lakelands District School Board has a Special Education Plan outlining programs and services for exceptional students. The Trillium Lakelands District School Board Special Education Advisory Committee (S.E.A.C.) advises the Board on any matter affecting the establishment and development of special education programs and services in respect of exceptional pupils of the Board. Further information on S.E.A.C. including membership and meeting dates, is available through the school.

The Special Education Plan and Parent Guide to Special Education are both available at the T.L.D.S.B. website www.tldsbc.on.ca.

GUIDANCE SERVICES

SCHOOL PROGRAM COORDINATION

Counsellors work with students throughout their high school years to select courses related to their abilities, motivation, interests, future academics and career goals. Students will be helped by their counsellors to keep track of the credits they need to meet diploma requirements. The ultimate

responsibility, however, for ensuring that graduation requirements are met, rests with the students and his/her parents or guardians.

FOR AN APPOINTMENT WITH A COUNSELLOR, PLEASE CALL 705-457-2950 AND ASK TO BE TRANSFERRED TO GUIDANCE OR DIAL EXTENSION 34020.

MONITORING STUDENT PROGRESS

The Guidance Department is responsible for providing feedback to parents and students through formal reports and Ontario School Records, as well as informal checks on student progress throughout the year. Parents and students may request a progress report at any time they wish additional information. Parent nights are arranged early in each semester to encourage parents and teachers to share information about expectations and performance.

POST SECONDARY ACADEMIC PLANNING

Counsellors are familiar with the requirements for admission to Ontario Universities and Community Colleges. Representatives of post-secondary institutions visit the school in the fall to prepare senior students for their future choices. University and College Information is available on the Guidance Services page of the HHSS website.

CAREER AND VOCATIONAL COUNSELLING

An ongoing career education program exposes students to information and values concerning the world of work and personal career interests. All students will take the Careers Course in grade 10 for half a credit. Various testing and information programs are available to all students and provide individuals with information on interests, abilities, careers, educational requirements, and programs related to apprenticeships.

HALIBURTON HIGHLANDS SECONDARY SCHOOL LIBRARY

The goal of the library is to provide a welcome and inviting environment for the students in which they may search for information, or reading material; to provide assistance and strategies for searching; and to provide the resources necessary to meet their needs. We also strive to encourage the exploration of a wide range of literature so that students may pursue their own interests.

Students may access the library's

- On-line catalogue, periodical databases, on-line encyclopaedia, and various electronic research tools.
- Microsoft Office and other school-wide software.
- Internet
- 12,000 volumes of fiction, non-fiction, encyclopaedia, periodicals

Most materials may be borrowed from the library for a two-week period. Some resources are loaned for overnight only. Services offered in the library include photocopying at 10 cents a page, and computer printing at \$1.00 for colour prints.

The teacher-librarians welcome any inquiries students may have and are most willing to help individuals in their searches.

Many teachers bring their classes to the library to learn about the resources available, to learn search strategies, and to learn research skills of collecting, organizing, processing, evaluating and reporting information.

GUIDELINES FOR POST-SECONDARY ADMISSIONS

Students and parents are encouraged to review admissions requirements for university, college, and apprenticeship programmes as they are making choices with regard to their grade 11 and 12 course selections. Detailed information can be found at:

Ontario Colleges

www.ontariocolleges.ca

Ontario University Information

www.electronicinfo.ca

Ontario Youth Apprenticeship Program

www.tldsb.on.ca/programs_oyap.htm

EXTENDED FRENCH PROGRAM

The Extended French program is intended for students who have completed the elementary school French Immersion program. Students electing to take the Extended French program will be required to complete seven Extended French courses prior to graduation. Students who successfully complete these credits are eligible for an Extended French Certificate. At H.H.S.S. the French courses are: Grade 9, 10, 11, 12 Extended French, Grade 9 Geography in French, Grade 10 History in French, Grade 10 Civics and Careers in French. Students in the French Extended Program who only want to take the French portion of the Extended French are welcome to do so.

SPECIALIST HIGH SKILLS MAJOR

A Specialist High Skills Major lets students focus on a potential career that matches their skills and interests.

Each major is a bundle of classroom courses, workplace experiences and sector certifications. Students who complete a major will receive a special designation on their high school diploma.

What will students in a hospitality and tourism major study?

A bundle of nine Grade 11 and Grade 12 credits in which students earn:

- Four hospitality and tourism major credits
- One English credit, a math credit and one credit of either science or business studies tailored to include units focused on hospitality and tourism
- Two cooperative education credits to gain workplace experience that enables students to refine, extend and practice sector-specific knowledge and skills
- Experiential learning, career exploration and reach ahead activities within the sector
- Certifications and training programs/courses in first aid, CPR, hazardous materials and Service Excellence (customer services)
- Essential skills and work habits required in the sector

What will students in an environment major study?

- Four environment major credits
- Two English credits, a math credit and one credit in science tailored to include units focused on the study of the environment

- Two cooperative education credits to gain workplace experience that enables students to refine, extend and practice sector-specific knowledge and skills
- Experiential learning, career exploration and reach ahead activities within the sector
- Certifications and training programs/courses in first aid, CPR, WHMIS and GPS
- Essential skills and work habits required in the sector

DUAL CREDITS

A number of interesting opportunities exist for students wishing to pursue Dual Credits. You can earn a credit through Fleming College while completing your diploma requirements at H.H.S.S. This gives you great experience and a chance to move forward with college plans while still in secondary school. This program involves no cost to the students and is currently offered in conjunction with visual arts, hospitality and tourism, and Environmental Science. For further information, speak with Mrs. Duchene.

STUDENT SUCCESS

The Student Success Team works together with students, parents, teachers, administrators, as well as the Student Services Department, to help support students in gaining the credits they need to graduate.

Student Success teachers work with students who need help with the adjustment to high school. They help them keep on track with due and/or overdue assignments. They also train students on assistive technology where needed. They advocate on behalf of the student to help them be as successful as they can.

SCHOOL CREDO

Our school believes in respect, commitment and responsibility in all aspects of school life here at H.H.S.S. School policies regarding attendance and behaviour are outlined in the **Student Handbook** which is available to all students at the beginning of the school year.

STUDENT EVALUATION AND EXAMINATIONS

Please refer to the “academic” section of the Student Handbook for an explanation of the evaluation and examination policy.

ATTENDANCE POLICY

Regular attendance is directly related to achievement in school. Therefore, all students are expected to attend school regularly.

Strong academic performance is directly related to regular attendance. Students are required to attend regularly and punctually in order to achieve the maximum benefits from the school program. A summary of the Attendance Policy is outlined in the Code of Conduct distributed in September.

CODE OF BEHAVIOUR

The complete student code of behaviour can be found in the Student Handbook.

CHANGING COURSE TYPES

(a) CROSS OVER MATERIALS

When a student plans to switch from one course type in Grade 9 to the other in Grade 10 in the same subject, the principal must inform the student and his or her parents that the student will be strongly encouraged to successfully complete additional course work of up to 30 hours and as defined by the Ministry in order to demonstrate achievement of the learning expectations that are included in the one Grade 9 course but not the other. This additional course work can be taken in summer school or in a program outside the regular school hours or during the school day. Please contact Mrs. Duchene in Guidance for more information.

(b) TRANSFER COURSES

Over the course of your 4 years in high school, your interests and goals might change as you gain experience and learn about new career options. If this should happen, you will be able to change pathways by taking a transfer course. Transfer courses will allow students who are taking one type of course in Grade 10 or 11 to switch to another type in the same subject in the next grade.

Transfer courses are more focused and shorter than regular courses, as they are designed to cover only the additional course content that bridges the gap between two course types. Transfer courses will be delivered in a variety of ways. Students will receive a partial credit for a successfully completed transfer course. Credits earned through transfer courses will qualify as optional credits towards the diploma requirements. Please contact Student Services for details about this opportunity and other methods of changing course types such as using correspondence or virtual learning.

DISTANCE EDUCATION

Courses may be able to be accessed by taking a continuing education course from a remote site (home) after school. The credit courses offered and registration process and timelines will be available through your guidance office, please keep informed.

Distance Education courses are available to **any resident** of the Trillium Lakelands District School Board. If you are not a current day school student and wish to work towards earning your secondary school diploma, please contact your nearest Adult Education and Training Centre.

THE VIRTUAL LEARNING CENTRE (VLC)

Distance Education credit courses are available to any resident of the Trillium Lakelands District School Board. If you wish to take a course via the VLC and are currently in school, you must have your home school's permission to take a course. Registration procedures are outlined on the web site:

www.virtuallearning.ca

NIGHT SCHOOL

Night School Co-op is available in Haliburton subject to enrolment. Approval to take this course while you are a student at a secondary school must be arranged prior to registration. For details on the registration process and timelines, please contact your guidance office.

Night School courses are available to **any resident** of the Trillium Lakelands District School Board. If you are not a current day school student and wish to work towards earning your secondary school diploma, please contact your nearest Adult Education and Training Centre.

SUMMER SCHOOL

Summer school programs are available to students currently registered in day school programs in Trillium Lakelands District School Board. For registration information and program format please contact your guidance office in mid-May.

COOPERATIVE EDUCATION

Cooperative Education provides students with hands on experience in the world of work. Students are given an opportunity to see how the knowledge gained in their in-school classes can be applied in the workplace. The co-op credits must be based on a related course in which the student is enrolled or which he/she has successfully completed. The course includes a classroom component; pre-placement and integration activities and a placement component.

Students must be 16 years of age to enrol in COOP programmes. Students must also have parental approval, fill out an application form and be interviewed and accepted by the co-op teacher(s).

For more information and the application form, see your guidance counsellor.

ONTARIO YOUTH APPRENTICESHIP PROGRAM

- Earn credits toward your high school diploma
- Become a registered apprentice
- Get real-world experience
- Possibly “earn while you learn”

To participate you must be 16 years of age or older, have earned 16 credits and be experiencing success in school. The Ontario Youth Apprenticeship Program allows a student the opportunity to work in a skilled trade through co-operative education and possibly register as an apprentice in one of 130 different trades, while working towards your diploma. For more information contact your school's Co-operative Education teacher, Guidance Counsellor or visit www.oyap.com.

PRIOR LEARNING ASSESSMENT AND RECOGNITION (P.L.A.R.)

Students may obtain credits towards the secondary school diploma (OSSD) for knowledge and skills that they have acquired outside of secondary school. This prior learning is assessed and evaluated to determine whether the student has met the provincial course expectations. Students may “challenge” a specific course for credit if they can provide evidence indicating a likelihood of success.

A student who believes that she or he possesses the full range of knowledge and skills for a Grade 10 or 11 course that is taught in the board should refer to the “Prior Learning Assessment” brochure for information about the Challenge Process and the due dates. Brochures are located in the guidance office. The student must be prepared to provide reasonable evidence for success in the challenge process (a combination of the following such as, a portfolio, documentation of related course work, recommendation from a teacher, etc.) Further, the student will be required to demonstrate achievement of the course expectations through formal tests and other assessment strategies appropriate for the particular course. Students who are successful in the challenge assessment will receive a final percentage grade and a credit for the course. Unsuccessful challenges will also be reported for Grade 11 and 12 courses as well as being recorded on their Cumulative Record of Prior Learning Assessment and Recognition Challenges.

COURSE DESCRIPTIONS

ARTS

ADA10 - DRAMA (Open)

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.

ADA20 - DRAMA (Open)

Recommended preparation: Drama, Grade 9, Open

This course provides opportunities for students to explore dramatic forms, conventions and techniques. Students will explore a variety of dramatic sources from various cultures and representing a range of genres. Students will use the elements of drama in creating and communicating through dramatic works. Students will assume responsibility for decisions made in the creative and collaborative processes and will reflect on their experiences.

ADA3M - DRAMA (University/College)

Prerequisite: Drama, Grade 9 or 10, Open

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.

ADA4M - DRAMA (University/College)

Prerequisite: Drama, Grade 11, University/College Preparation

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

AMI10 - INSTRUMENTAL MUSIC BAND (Open)

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 transferrable to other areas of their life. Reed instrument players will be expected to purchase reeds.

AMI20 - INSTRUMENTAL MUSIC BAND (Open)

Recommended preparation: Music, Grade 9, Open

This course emphasizes the creating 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.

AMG10 – GUITAR MUSIC (Open)

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 transferrable to other areas of their life. Students are required to supply their own acoustic guitar for this course.

AMG20 - GUITAR MUSIC (Open)

Recommended preparation: Music, Grade 9, Open

This course emphasizes the creating 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. Students are required to supply their own acoustic guitar for this course.

AMG3M - GUITAR MUSIC (University/College)

Recommended preparation: AMG20

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. Students are required to supply their own acoustic guitar for this course.

AMG4M - GUITAR MUSIC (University/College)

Recommended preparation: AMG3M

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. Students are required to supply their own acoustic guitar for this course.

AMI3M - INSTRUMENTAL MUSIC - BAND (University/College)

Prerequisite: Music, Grade 9 or 10, Open

This course provides students with opportunities to develop their musical literacy through the creation, appreciation, analysis, and performance of music, including traditional, commercial and art music. Students will apply the creative process when performing appropriate technical exercises and repertoire and will employ the critical analysis processes when reflecting on, responding to, and 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. Reeds can be purchased in class for students who need them.

AMI4M - INSTRUMENTAL MUSIC - BAND (University/College)

Prerequisite: Music, Grade 11, University/College Preparation

This course enables students to enhance their musical literacy through the creation, appreciation, analysis, and performance of music. Students will perform traditional, commercial and art music, and will respond with insight to live and recorded performances. Students will enhance their understanding of the function of music in society and the impact of music on themselves and various communities and cultures. Students will analyze how to apply skills developed in music to their life and careers. Reeds can be purchased in class for students who need them.

ASM20 – MEDIA ARTS (Open)

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. This course is geared towards the beginner level.

ASM30 – MEDIA ARTS (Open)

Recommended preparation: Media Arts, Grade 10 Open

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

AVI10 - VISUAL ARTS (Open)

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

AVI20 - VISUAL ARTS (Open)

Recommended preparation: Visual Arts, Grade 9, Open

This course enables students to develop their skills in producing and presenting art by introducing them to new ideas, materials, and processes for artistic exploration and experimentation. Students will apply the elements and principles of design when exploring the creative process. Students will use the critical analysis process to reflect on and interpret art within a personal, contemporary and historical context.

Sketchbooks will be available for purchase in class. Students will be expected to provide their own sketchbook.

AVI3M - VISUAL ARTS (University/College)

Prerequisite: Visual Arts, Grade 9 or 10, Open

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. The course may be delivered as a comprehensive program or through a program focused on a particular art form (e.g. photography, video, computer graphics, information design). Sketchbooks will be available for purchase in class. Students will be expected to provide their own sketchbook.

AWL30 - VISUAL ARTS – DRAWING (Open) (offered every other year) (Offered again in 2019-2020)

Recommended preparation: Visual Arts, Grade 9 or 10, Open

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. This course will focus on drawing and is taught as a dual credit course with Fleming College.

AVI4M - VISUAL ARTS (University/College)

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

This course focuses on enabling students to refine their use of the creative process when creating and presenting two- and three-dimensional art works using a variety of traditional and emerging media and technologies. Students will use the critical analysis process to deconstruct art works and explore connections between art and society. The studio program enables students to explore a range of materials, processes and techniques that can be applied in their own art production. Students will also make connections between various works of art in personal, contemporary, historical, and cultural contexts. This course will be taught as a dual credit – Design 1 - team taught with instructor from Fleming College.

AWN30 - VISUAL ARTS - PAINTING (Open)

Recommended preparation: Visual Arts, Grade 9 or 10, Open

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. This course will focus on painting. This course will focus on drawing and is taught as a dual credit course with Fleming College.

AWT4M - VISUAL ARTS-NON-TRADITIONAL/PORTFOLIO (University/College)

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

This course focuses on enabling students to refine their use of the creative process when creating and presenting two- and three-dimensional art works using a variety of traditional and emerging media and technologies. Students will use the critical analysis process to deconstruct art works and explore connections between art and society. The studio program enables students to explore a range of materials, processes and techniques that can be applied in their own art production. Students will also make connections between various works of art in personal, contemporary, historical, and cultural contexts. This course requires much independent work and assumes that the student has successfully completed AVI4M Visual Arts.

BUSINESS STUDIES

There may be a field trip charge which students will pay as arranged in class. Costs will vary from \$10. to \$40. per trip.

BTT10 - INFORMATION AND COMMUNICATION TECHNOLOGY IN BUSINESS (Open)

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

BMX3E - MARKETING: RETAIL AND SERVICE (Workplace)

Prerequisite: None

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.

BOG4E - BUSINESS LEADERSHIP: BECOMING A MANAGER (Workplace)

Prerequisite: None

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.

COMPUTER AND INFORMATION SCIENCE

ICS20 - INTRODUCTION TO COMPUTER STUDIES (Open)

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. Students will learn practical programming techniques and use their Web Design skills (HTML, JavaScript and Flash Action Script) to enhance our H.H.S.S. school website.

ENGLISH

ENG1D - ENGLISH (Academic)

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

of strategies that contribute to effective communication. The course is intended to prepare students for the Grade 10 academic English course, which leads to university or college preparation courses in Grades 11 and 12.

ENG1P - ENGLISH (Applied)

This course is designed to develop the key oral communications, 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.

ENG1L - LOCALLY DEVELOPED ENGLISH

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 11 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 in practice the processes involved in talking, listening, reading, viewing, writing, and thinking, and reflect regularly upon their growth in these areas.

ENG2D - ENGLISH (Academic)

Prerequisite: English, Grade 9, Academic or Applied

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.

ENG2P - ENGLISH (Applied)

Prerequisite: English, Grade 9, Academic or Applied

This course is designed to extend the range of oral communications, 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.

ENG2L - LOCALLY DEVELOPED ENGLISH

In this course, students focus on extending their literacy and communication skills to prepare for success in their daily lives, in the workplace, 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.

ENG3U - ENGLISH (University)

Prerequisite: English, Grade 10, Academic

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.

ENG3C - ENGLISH (College)

Prerequisite: English, Grade 10, Applied

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.

ENG3E - ENGLISH (Workplace)

Prerequisite: English, Grade 10, Applied

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.

ENG4U - ENGLISH (University)

Prerequisite: English, Grade 11, University Preparation

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

EWC4U - THE WRITER'S CRAFT (University) (offered every other year) (Offered again in 2019-2020)

Prerequisite: English, Grade 11, University Preparation

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

ENG4C - ENGLISH (College)

Prerequisite: English, Grade 11, College Preparation

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

**EWC4C - THE WRITER'S CRAFT (College) (offered every other year)
(Offered again in 2019-2020)**

Prerequisite: Grade 11 English, College Preparation

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

ENG4E - ENGLISH (Workplace)

Prerequisite: English, Grade 11, Workplace Preparation

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will analyze informational, graphic, and literary texts and create oral, written, and media texts in a variety of forms for workplace-related and practical purposes. An important focus will be on using language accurately and organizing ideas and information coherently. The course is intended to prepare students for the workplace and active citizenship.

OLC40 - ONTARIO SECONDARY SCHOOL LITERACY COURSE (Open)

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

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.

FAMILY STUDIES

In today's increasingly complex world there is a growing need to understand family dynamics and to develop skills related to that area. Family Studies can give students the self-confidence, interpersonal skills and awareness they will need to function well in a family context and manage their own family life in a climate of societal, cultural, technological and scientific change.

HPC30 – RAISING HEALTHY CHILDREN (Open)

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 behaviour. Students will develop their research skills through investigations related to caregiving and child rearing.

FRENCH

By studying French, students will develop communication skills in the French language and understand better the structure of other modern languages (such as English). We shall explore the culture of French Canada, France and the many countries that make up "La Francophonie". Daily participation is important and, as the students' abilities to understand spoken and written French increase, so will the self-confidence

to use French in the classroom and elsewhere.

FEF1D - EXTENDED FRENCH (Academic)

Prerequisite: Minimum of 1260 hours of French instruction, or equivalent

This course provides opportunities for students to speak and interact in French in a variety of real-life and personally relevant contexts. Students will develop their skills in listening, speaking, reading, and writing by using language learning strategies introduced in the elementary Extended French program. They will develop their creative and critical thinking skills through independently responding to and interacting with a variety of oral and written texts. They will also enhance their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

FSF1D - CORE FRENCH (Academic)

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 their daily lives. Students will develop their 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.

FSF1P - CORE FRENCH (Applied)

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.

FEF2D - EXTENDED FRENCH (Academic)

Prerequisite: Extended French, Grade 9, Academic

This course provides extensive opportunities for students to use their communication skills in French and to apply language learning strategies. Students will develop their skills in listening, speaking, reading, and writing by responding to and interacting with French oral and written texts in a variety of real-life contexts, using their creative and critical thinking skills to explore and evaluate information and ideas in the texts. Students will increase their knowledge of the French language through the study of French authors. They will also increase their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

FSF2D - CORE FRENCH (Academic)

Prerequisite: Core French, Grade 9, Academic or Applied

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.

FEF3U - EXTENDED FRENCH (University)

Prerequisite: Extended French, Grade 10, Academic

This course provides opportunities for students to communicate about concrete and abstract topics in

various situations. Students will consolidate and refine their skills in listening, speaking, reading, and writing by applying language learning strategies, as well as creative and critical thinking skills, in a variety of real-life contexts. Students will develop their knowledge of the French language through the study of contemporary French authors and well-known French European authors. They will also deepen their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

FSF3U - CORE FRENCH (University)

Prerequisite: Core French, Grade 10, Academic

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.

FEF4U - EXTENDED FRENCH (University)

Prerequisite: Extended French, Grade 11, University Preparation

This course further emphasizes the consolidation of communication skills required to interact in French for various purposes about concrete and abstract topics. Students will independently apply language learning strategies in a variety of real-life and personally relevant contexts in listening, speaking, reading, and writing, and will broaden their creative and critical thinking skills through responding to and analysing oral and written texts. Students will increase their knowledge of the French language through the study of Canadian and international French literature. They will also enrich their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

FSF4U - CORE FRENCH (University)

Prerequisite: Core French, Grade 11, University Preparation

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

GEOGRAPHY

CGC1D – ISSUES IN CANADIAN GEOGRAPHY (Academic)

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

CGC1DE – ISSUES IN CANADIAN GEOGRAPHY (Academic) GEOGRAPHIE - EXTENDED FRENCH

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

Note: The instructional language for this course is French.

CGC1P – ISSUES IN CANADIAN GEOGRAPHY (Applied)

This course focuses on current geographic issues that affect Canadians. Students will draw on their personal and everyday experiences as they explore issues relating to food and water supplies, competing land uses, interactions with the natural environment, and other topics relevant to sustainable living in Canada. They will also develop an awareness that issues that affect their lives in Canada are interconnected with issues in other parts of the world. Throughout the course, students will use the concepts of geographic thinking, the geographic inquiry process, and spatial technologies to guide and support their investigations.

CGG30 - TRAVEL AND TOURISM: A GEOGRAPHIC PERSPECTIVE (Open)

Prerequisite: Issues in Canadian Geography, Grade 9, Academic or Applied

This course focuses on issues related to travel and tourism within and between various regions of the world. Students will investigate unique environmental, sociocultural, economic, and political characteristics of selected world regions. They will explore travel patterns and trends, as well as tensions related to tourism, and will predict future tourism destinations. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate the impact of the travel industry on natural environments and human communities.

CGW4U - WORLD ISSUES: A GEOGRAPHIC ANALYSIS (University) (Offered every other year) (Offered again in 2019-2020)

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

In this course, students will address the challenge of creating a more sustainable and equitable world. They will explore issues involving a wide range of topics, including economic disparities, threats to the environment, globalization, human rights, and quality of life, and will analyse government policies, international agreements, and individual responsibilities relating to them. Students will apply the concepts of geographic thinking and the geographic inquiry process, including the use of spatial technologies, to investigate these complex issues and their impacts on natural and human communities around the world.

CGR4E - LIVING IN A SUSTAINABLE WORLD (Workplace) 4 credit package

This course is part of a package designed to enable students to enter the work force or further education with a portfolio of skills relating to a career in environmental studies, or some other employment setting.

The courses within this package include: Geography, 2 Co-op credits and Environmental Science. This package of courses will provide students with opportunities to:

- Earn certifications in first aid, C.P.R., W.H.M.I.S., GPS, etc.
- Gain work experience in both the tourist and the environmental industries.
- Experience field studies and eco-adventures (partial day and multiday treks).
- Raise their awareness and appreciate environmental issues and topics.

The program will involve extra time outside of the regular classroom hours, where students will be involved in job-related activities. Many of the opportunities in this program will be provided at no cost. However, some of the accreditations and transportation will involve a **cost to the student of \$250.00**.

This program is now a Specialist High Skills Major and offers a dual credit with Fleming College - see Page 9 for more information on this environment major.

GUIDANCE/CO-OPERATIVE EDUCATION

GLC20 - CAREER STUDIES .5 credit (Open)

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

GLC20E - CAREER STUDIES .5 credit (Open)

L'EXPLORATION DES CHOIX DE CARRIERE - EXTENDED FRENCH

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

CO-OPERATIVE EDUCATION

DCO30 - CREATING OPPORTUNITIES THROUGH CO-OP, GRADE 11 (Open)

Prerequisite: None

This course consists of a community-connected experience and a cooperative education curriculum focused on developing skills, knowledge, and habits of mind that will support students in their learning at school and beyond, today and in the future, as well as in their education and career/life planning. Within the context of the community-connected experience, students will apply skills, knowledge, and habits of mind that will protect and promote their health, safety, and well-being and that will strengthen their inquiry, decision-making, and leadership skills. Students will create and implement a learning plan that meets their particular interests and needs, reflect on their learning, and make connections between their experience in the community and other aspects of their lives.

This cooperative education course consists of a community-connected experience and cooperative education curriculum and may benefit students who:

- Have a particular area of interest but do not have an appropriate or relevant related course or courses to relate their learning to (e.g., due to scheduling conflicts, limited course offerings); or
- are seeking to explore, investigate and learn about a broader range of education and career/life opportunities; or
- are interested in designing their own innovative or entrepreneurial opportunity that draws upon their interests, skills and career/life goals.

Students participating in *Creating Opportunities through Co-op* may earn a maximum of two grade 11 cooperative education credits using this course code. If the student wishes to obtain further cooperative education credits, they may take *Cooperative Education Linked to a Related Course (or Courses)* and comply with the appropriate requirements.

COOPERATIVE EDUCATION LINKED TO A RELATED COURSE (OR COURSES)

Prerequisite: None

This course consists of a community-connected experience and a cooperative education curriculum that incorporates relevant expectations from the student's related course (or courses). Students will develop skills, knowledge, and habits of mind that will support them in their learning at school and beyond, today and in the future, as well as in their education and career/life planning. Within the context of the community-

connected experience, students will apply, extend, and refine skills and knowledge acquired in their related course or courses and will apply skills, knowledge, and habits of mind that will protect and promote their health, safety, and well-being. They will create and implement a learning plan that meets their particular interests and needs, reflect on their learning, and make connections between their experience in the community and other aspects of their lives.

This course consists of a community-connected experience, the cooperative education curriculum, and a set of expectations from the related course (or courses) and may benefit students who:

- wish to pursue experiences that provide opportunities to deepen their understanding of a particular area of interest related to a course or courses they are taking concurrently or have successfully completed.

Students participating in the *Cooperative Education Linked to a Related Course (or Courses)* may earn a minimum of one and a maximum of two cooperative education credits for each credit earned from a related course or courses previously completed or taken concurrently 1 to a *maximum of four credits for the course*.

ONTARIO YOUTH APPRENTICESHIP PROGRAM (OYAP)

The Ontario Youth Apprenticeship Program (OYAP) is a specialized program that enables students who are 16 years of age or older to meet diploma requirements while participating in an occupation that requires apprenticeship.

All students participating in **OYAP** must:

- Complete 16 credits towards the OSSD prior to starting the program.
- Be enrolled as full-time students during the program.
- Complete all compulsory credits required for the OSSD.

HISTORY

CHC2D - CANADIAN HISTORY SINCE WORLD WAR I (Academic)

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

CHC2DE - CANADIAN HISTORY SINCE WORLD WAR I (Academic)

HISTOIRE - EXTENDED FRENCH

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

CHC2P - CANADIAN HISTORY SINCE WORLD WAR I (Applied)

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

relevance of historical developments and how they have helped shape communities in present-day Canada.

CHC2L - LOCALLY DEVELOPED CANADIAN HISTORY SINCE WORLD WAR I

Prerequisite: None

This course focuses on the connections between the student and key people, events and themes in Canadian contemporary studies. Students prepare for grade 11 Canadian and World Studies Workplace Preparation courses through the development and extension of historical literacy skills and critical thinking skills. Students explore a variety of topics highlighting individuals and events that have contributed to the story of Canada. The major themes of Canadian identity, internal and external relationships and changes since 1914, are explored through guided investigation. Students have the opportunity to extend analytical skills with a focus on identifying and interpreting events and perspectives and making connections. Students practise reading, writing, visual, and oral literacy skills to identify and communicate ideas in a variety of media.

CHV2O - CIVICS AND CITIZENSHIP .5 credit (Open)

This course explores rights and responsibilities associated with being an active citizen in a democratic society. Students will explore issues of civic importance such as healthy schools, community planning, environmental responsibility, and the influence of social media, while developing their understanding of the role of civic engagement and of political processes in the local, national, and/or global community. Students will apply the concepts of political thinking and the political inquiry process to investigate, and express informed opinions about, a range of political issues and developments that are both of significance in today's world and of personal interest to them.

CHV2OE - CIVICS AND CITIZENSHIP .5 credit (Open)

LA CITOYENNETE - EXTENDED FRENCH

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.

Note: The instructional language for this course is French.

CHA3U - AMERICAN HISTORY (University) (offered every other year) (Offered again in 2019-2020)

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

This course explores key aspects of the social, economic, and political development of the United States from precontact to the present. Students will examine the contributions of groups and individuals to the country's evolution and will explore the historical context of key issues, trends, and events that have had an impact on the United States, its identity and culture, and its role in the global community. 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 various forces that helped shape American history.

CHW3M - WORLD HISTORY TO THE END OF THE FIFTEENTH CENTURY (University/College) (offered every other year) (Offered in 2018-2019)

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

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.

**CHM4E - ADVENTURES IN WORLD HISTORY (Workplace) (offered every other year)
(Offered again in 2019-2020)**

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

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.

CLU3M - UNDERSTANDING CANADIAN LAW (University/College)

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

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.

CLU3E - UNDERSTANDING CANADIAN LAW IN EVERYDAY LIFE (Workplace)

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

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.

**CHI4U - CANADA: HISTORY, IDENTITY, AND CULTURE (University)
(offered every other year) (Offered in 2018-2019)**

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

This course traces the history of Canada, with a focus on the evolution of our national identity and culture as well as the identity and culture of various groups that make up Canada. Students will explore various developments and events, both national and international, from precontact to the present, and will examine various communities in Canada and how they have contributed to identity and heritage in Canada. Students will investigate the development of culture and identity, including national identity, in Canada and how and why they have changed throughout the country's history. 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 the people, events, and forces that have shaped Canada.

**CHY4U - WORLD HISTORY SINCE THE FIFTEENTH CENTURY (University)
(offered every other year) (Offered again in 2019-2020)**

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.

HSP3U - INTRODUCTION TO ANTHROPOLOGY, PSYCHOLOGY, AND SOCIOLOGY (University)

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

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.

NBV3C - BELIEFS, VALUES, AND ASPIRATIONS OF ABORIGINAL PEOPLES IN CONTEMPORARY SOCIETY (College)

Prerequisite: Grade 10 First Nations, Metis, and Inuit Peoples in Canada (Open), or Grade 10 Canadian History since World War I, Academic or Applied

This course focuses on the diverse beliefs, values, and aspirations between First Nations, Métis, and Inuit peoples of Canada and the political, economic, cultural and social challenges facing Aboriginal individuals and communities from various regions and cultures. By examining their own beliefs, values and assumptions, the worldviews of others and factors that influence world views, students will appreciate how traditional and contemporary beliefs and values influence present and future aspirations of Aboriginal peoples.

HSB4U - CHALLENGE AND CHANGE IN SOCIETY (University)

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

This course focuses on the use of social science theories, perspectives, and methodologies to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour and their impact on society. Students will critically analyze how and why cultural, social, and behavioural 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.

INTERDISCIPLINARY STUDIES

IDC30 - INTERDISCIPLINARY STUDIES (Open)

Prerequisite: None

This course will help students combine the skills required for and knowledge of different subjects and disciplines to solve problems, make decisions, create personal meaning, and present findings beyond the scope of a single subject or discipline. Through individual and collaborative inquiry and research, students will analyse the connections among diverse subjects and disciplines; develop information literacy skills in analysing, selecting, evaluating, and communicating information; and become aware of a variety of resources and viewpoints on contemporary issues. They will also examine their own learning styles, relate their inquiries and research to real-life situations, and investigate career opportunities in new disciplines. The focus of this course is student leadership and students must complete an application form.

IDC40 - INTERDISCIPLINARY STUDIES (Open)

Prerequisite: None

This course emphasizes the development of practical skills and knowledge to solve problems, make decisions, create personal meaning, and present findings beyond the scope of a single subject or

discipline. Through individual and collaborative inquiry and research into contemporary issues, real-life situations, and careers, students will apply the principles and skills derived from the complementary subjects and disciplines studied, evaluate the reliability of information, and examine how information technology can be used safely, effectively, and legally. They will also learn how to select strategies to define problems, research alternative solutions, assess their thinking in reaching decisions, and adapt to change as they acquire new knowledge. The focus of this course is student leadership and students must complete an application form.

IDC4U - INTERDISCIPLINARY STUDIES (University)

Prerequisite: Any university or university/college preparation course

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

MATHEMATICS

MPM1D - PRINCIPLES OF MATHEMATICS (Academic)

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

MFM1P - FOUNDATIONS OF MATHEMATICS (Applied)

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

MAT1L - LOCALLY DEVELOPED MATHEMATICS

This course emphasizes further development of mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, in the Grade 10 locally developed compulsory credit course, and in the Mathematics Grade 11 and Grade 12 Workplace Preparation courses. The course is organized by three strands related to money sense, measurement, and proportional reasoning. In all strands, the focus is on developing and consolidating key foundational mathematical concepts and skills by solving authentic, everyday problems. Students have opportunities to further develop their mathematical literacy and problem-solving skills and to continue developing their skills in reading, writing, and oral language through relevant and practical math activities.

MPM2D - PRINCIPLES OF MATHEMATICS (Academic)

Prerequisite: Mathematics, Grade 9, Academic

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

MFM2P - FOUNDATIONS OF MATHEMATICS (Applied)

Prerequisite: Mathematics, Grade 9, Academic or Applied

This course enables students to consolidate their understanding of linear relations and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and hands-on activities. Students will develop and graph equations in analytic geometry; solve and apply linear systems, using real-life examples; and explore and interpret graphs of quadratic relations. Students will investigate similar triangles, the trigonometry of right triangles, and the measurement of three-dimensional figures. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

MAT2L - LOCALLY DEVELOPED MATHEMATICS

Prerequisite: A Grade 9 Mathematics Credit

This course emphasizes the extension of mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, and in the Mathematics Grade 11 and Grade 12 Workplace Preparation courses. The course is organized by three strands related to money sense, measurements, and proportional reasoning. In all strands, the focus is on strengthening and extending key foundational mathematical concepts and skills by solving authentic, everyday problems. Students have opportunities to extend their mathematical literacy and problem-solving skills and to continue developing their skills in reading, writing, and oral language through relevant and practical math activities.

MCR3U - FUNCTIONS (University)

Prerequisite: Principles of Mathematics, Grade 10, Academic

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

MCF3M - FUNCTIONS AND APPLICATIONS (University/College)

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

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 modelling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

MBF3C - FOUNDATIONS FOR COLLEGE MATHEMATICS (College)

Prerequisite: Foundations of Mathematics, Grade 10, Applied

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

data involving one variable; connect probability and statistics; and solve problems in geometry and trigonometry. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

MEL3E - MATHEMATICS FOR WORK AND EVERYDAY LIFE (Workplace)

Prerequisite: Principles of Mathematics, Grade 9, Academic or Foundations of Mathematics, Grade 9, Applied or MAT2L

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will solve problems associated with earning money, paying taxes, and making purchases; apply calculations of simple and compound interest in saving, investing, and borrowing; and calculate the costs of transportation and travel in a variety of situations. Students will consolidate their mathematics skills as they solve problems and communicate their thinking.

MHF4U - ADVANCED FUNCTIONS (University)

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

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

MCV4U - CALCULUS AND VECTORS (University)

Prerequisite: Note - The Advanced Functions course must be taken prior to or concurrently with Calculus and Vectors

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 representation of lines and planes in three-dimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, sinusoidal, exponential, rational, and radical functions; and apply these concepts and skills to the modelling of real-world relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who choose to pursue careers in fields such as science, engineering, economics, and some areas of business, including those students who will be required to take a university-level calculus, linear algebra, or physics course.

MDM4U - MATHEMATICS OF DATA MANAGEMENT (University)

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

This course broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing and analyzing large amounts of information; solve problems involving probability and statistics; and carry out a culminating investigation that integrates statistical concepts and skills. Students will also refine their use of the mathematical process necessary for success in senior mathematics. Students planning to enter university programs in business, the social sciences, and the humanities will find this course of particular interest.

MAP4C - FOUNDATIONS FOR COLLEGE MATHEMATICS (College)

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

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyze data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning

accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.

MCT4C - MATHEMATICS FOR COLLEGE TECHNOLOGY (College)

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

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

MEL4E - MATHEMATICS FOR WORK AND EVERYDAY LIFE (Workplace)

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

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will investigate questions involving the use of statistics; apply the concept of probability to solve problems involving familiar situations; investigate accommodation costs, create household budgets, and prepare a personal income tax return; use proportional reasoning; estimate and measure; and apply geometric concepts to create designs. Students will consolidate their mathematics skills as they solve problems and communicate their thinking.

HEALTHY ACTIVE LIVING EDUCATION

The Physical and Health Education program is designed to provide students with the opportunity to earn a credit no matter what their natural athletic ability. Positive daily participation, good effort, enthusiasm and co-operation as well as evidence of the acquisition of knowledge in the areas dealt with are used as a measure of whether or not the student has achieved the major objective of the course, i.e. a positive attitude toward the value of physical exercise in the development of good physical, mental and social health.

PPL10M (Male) / PPL10F (Female) - HEALTHY ACTIVE LIVING EDUCATION (Open)

This course equips students with the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities, students develop knowledge and skills related to movement competence and personal fitness that provide a foundation for active living. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.

PPL20M (Male) / PPL20F (Female) - HEALTHY ACTIVE LIVING EDUCATION (Open)

This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities, students develop knowledge and skills related to movement competence and personal fitness that provide a foundation for active living. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.

PAI2OF (Female) - HEALTHY ACTIVE LIVING EDUCATION - SMALL GROUP ACTIVITIES (Open)

This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities, students develop knowledge and skills related to movement competence and personal fitness that provide a foundation for active living. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. This will be an all-female class that will focus on a variety of individual and small group activities.

PAF30 - PERSONAL & FITNESS ACTIVITIES (Open)

Recommended Preparation: Healthy Active Living Education, Grade 10, Open

This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities and exposure to a broader range of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. This course differs from PPL in that it will be co-ed and the emphasis will be on a self-directed personal fitness profile.

PPL3OM (Male) / PPL3OF (Female) - HEALTHY ACTIVE LIVING EDUCATION (Open)

Prerequisite: None

This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities and exposure to a broader range of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. This course differs from Personal & Fitness Activities (PAF) in that the focus is on team sports, game play and officiating skills.

PAF40 (Co-ed) - HEALTHY ACTIVE LIVING: FITNESS (Open)

Prerequisite: None

This course enables students to further develop the knowledge and skills they need to make healthy choices. It places special emphasis on how students can maintain the habits of healthy, active living throughout their lives as they make the transition to adulthood and independent living. Through participation in a wide range of physical activities in a variety of settings, students can enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. This course emphasizes self-directed fitness activities as well as acquisition of knowledge.

PPL40 (Co-ed) - HEALTHY ACTIVE LIVING EDUCATION (Open)

Prerequisite: None

This course enables students to further develop the knowledge and skills they need to make healthy choices. It places special emphasis on how students can maintain the habits of healthy, active living throughout their lives as they make the transition to adulthood and independent living. Through participation in a wide range of physical activities in a variety of settings, students can enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with

others, and develop their ability to think critically and creatively. Students may be required to pay an activity fee of approximately \$30. to cover activities that occur in our community (e.g. golf).

PSK4U – INTRODUCTORY KINESIOLOGY (University) (offered every other year) (Offered again in 2019-2020)

Prerequisite: Any Grade 11 university or university/college preparation course in science, or any Grade 11 or 12 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.

SCIENCE

Our students will have opportunities to develop the science-related attitudes, skills and knowledge to nurture inquiry, to problem-solve, to make decisions, to become lifelong learners and to maintain a sense of wonder about the world around them. As students advance from grade to grade, their knowledge and skills are applied in increasingly demanding contexts. Through applications, community outreach and independent study each science student is encouraged to understand the role and contribution of science in their lives.

SNC1D - SCIENCE (Academic)

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

SNC1P - SCIENCE (Applied)

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

SNC1L - LOCALLY DEVELOPED SCIENCE

This course emphasizes, reinforces and strengthens 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.

SNC2D - SCIENCE (Academic)

Prerequisite: Science, Grade 9, Academic or Applied

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.

SNC2P - SCIENCE (Applied)

Prerequisite: Science, Grade 9, Academic or Applied

This course enables students to develop a deeper understanding of concepts in biology, chemistry, earth and space science, and physics, and to apply their knowledge of science in real-world situations. Students are given opportunities to develop further practical skills in scientific investigation. Students will plan and conduct investigations into everyday problems and issues related to human cells and body systems; chemical reactions; factors affecting climate change; and the interaction of light and matter.

SBI3U - BIOLOGY (University)

Prerequisite: Science, Grade 10, Academic

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.

SBI3C - BIOLOGY (College)

Prerequisite: Science, Grade 10, Academic or Applied

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.

SCH3U - CHEMISTRY (University)

Prerequisite: Science, Grade 10, Academic

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

SPH3U - PHYSICS (University)

Prerequisite: Science, Grade 10, Academic

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.

SVN3E - ENVIRONMENTAL SCIENCE (Workplace)

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

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.

SBI4U - BIOLOGY (University)

Prerequisite: Biology, Grade 11, University Preparation

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

SCH4U - CHEMISTRY (University)

Prerequisite: Chemistry, Grade 11, University Preparation

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

SPH4U - PHYSICS (University)

Prerequisite: Physics, Grade 11, University Preparation

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

SCH4C - CHEMISTRY (College)

Prerequisite: Science, Grade 10, Academic or Applied

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.

SPH4C - PHYSICS (College)

Prerequisite: Science, Grade 10, Academic or Applied

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.

SES4U - EARTH AND SPACE SCIENCE (University) (offered every other year) (Offered in 2018-2019)

Prerequisite: Grade 10 Science, Academic

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.

TECHNOLOGICAL STUDIES

The aims of technical education are the same as those of education as a whole. However, the environment of a shop is different than that of the average classroom. Both are attempting to develop the students' capacities, constructive attitudes toward society, and their personalities. In the shops, students are confronted with concrete rather than abstract problems. The analysis and solution require the use of their related and past experiences, and the final decisions are proven in practical applications.

The objectives of the technical program may be summed up as follows:

To develop:

- "safety thinking" by the students, aided by work areas designed and equipped with safety in mind
- a broadening of the student's horizons through trips to industrial and related education sites
- an awareness of the constantly changing world in which they live
- an appreciation of the relationships of the various disciplines
- a positive attitude to learning and good work habits
- the use of resource materials
- manipulative skills
- assumption of responsibility
- the ability to work with others and to accept instruction and direction
- a broad education base for future learning
- communicative skills

Broad-Based Technology - An Explanation

Broad-based technology is an initiative which expands the concept of technological education. Technology is defined as the practical use of ideas, materials, and energy to create products, knowledge, processes, and systems to improve society. This extends technology beyond the invention and operation of machines.

The ten technological concepts of structures, materials, fabrication, mechanisms, power and energy, controls, systems, function, aesthetics and ergonomics, as they apply to physical products, human systems and environmental processes will form the basis of all broad-based technology programmes.

Project-driven interconnected activities, tasks or projects will be used through which students reach the outcomes that have been developed for a particular course or programme. They will learn theoretical principles as needed by performing specific activities that are related to the completion of a project. Open-ended problem solving will be used for solving challenges and problems that arise in the completion of projects. The process that is used in the completion of the project is at least as important as the finished product. It is expected that the student taking a BBT course will have achieved a level of self-directedness and can work with a degree of independence. These skills should develop further as the student progresses through the program.

In these integrated programmes students will learn knowledge, skills, and values that are related to all subjects through common themes or group activities. This integration may occur within technological subject areas, between technological and other subject areas, or with combinations of both.

TECHNOLOGICAL DESIGN

TIJ10 - EXPLORING TECHNOLOGIES (Open)

This course enables students to further explore and develop technological knowledge and skills introduced in the elementary science and technology program. Students will be given the opportunity to design and create products and/or provide services related to the various technological areas or industries, working with a variety of tools, equipment, and software commonly used in industry. Students will develop an awareness of environmental and societal issues, and will begin to explore secondary and postsecondary education and training pathways leading to careers in technology-related fields.

TCJ20 - CONSTRUCTION TECHNOLOGY (Open)

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.

TDJ20 - TECHNOLOGICAL DESIGN (Open)

Prerequisite: None

This course provides students with opportunities to apply a design process to meet a variety of technological challenges. Students will research projects, create designs, build models and/or prototypes, and assess products and/or processes using appropriate tools, techniques, and strategies. Student projects may include designs for homes, vehicles, bridges, robotic arms, clothing, or other products. Students will develop an awareness of environmental and societal issues related to technological design, and will learn about secondary and postsecondary education and training leading to careers in the field. This will be a computer-based course utilizing design/drafting software used in the construction and manufacturing industries.

TWJ3E - CUSTOM WOODWORKING (Workplace)

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.

TWJ4E - CUSTOM WOODWORKING (Workplace)

Prerequisite: Custom Woodworking, Grade 11, Workplace Preparation

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.

HOSPITALITY AND TOURISM

TFJ10 - EXPLORING HOSPITALITY AND TOURISM (Open)

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 post-secondary pathways leading to careers in the field.

TFJ20 - HOSPITALITY AND TOURISM (Open)

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.

TFJ3C - HOSPITALITY AND TOURISM (College)

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.

TFJ4C - HOSPITALITY AND TOURISM (College)

Prerequisite: Hospitality and Tourism, Grade 11, College Preparation

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

TFB4E - Hospitality and Tourism: Baking

Prerequisite: Hospitality and Tourism, Grade 11, Workplace Preparation

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. This course provides an emphasis on Baking.

TRANSPORTATION TECHNOLOGY

TTJ20 - TRANSPORTATION TECHNOLOGY (Open)

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

TTJ3C - TRANSPORTATION TECHNOLOGY (College)

Prerequisite: None

This course enables students to develop technical knowledge and skills as they study, test, service, and repair engine, electrical, suspension, brake, and steering systems on vehicles, aircraft, and/or watercraft. Students will develop communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will develop an awareness of environmental and societal issues related to transportation and will learn about apprenticeship and college programs leading to careers in the transportation industry.

TTJ4E - TRANSPORTATION TECHNOLOGY: VEHICLE MAINTENANCE (Workplace)

Prerequisite: Transportation Technology, Grade 11, Workplace Preparation

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

MANUFACTURING TECHNOLOGY

TMJ20 - MANUFACTURING TECHNOLOGY (Open)

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.

TMJ3E - MANUFACTURING TECHNOLOGY (Workplace)

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.

TMJ4E - MANUFACTURING TECHNOLOGY (Workplace)

Prerequisite: Manufacturing Technology, Grade 11, Workplace Preparation

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

COMMUNICATIONS TECHNOLOGY

TGJ3M1/TGJ3M2 - COMMUNICATIONS TECHNOLOGY (Yearbook) (College/University)

Prerequisite: None

This course examines communications technology from a media perspective. Students will develop knowledge and skills as they design and produce media projects in the areas of live, recorded, and graphic communications. These areas may include TV, video, and movie production; radio and audio production; print and graphic communications; photography; digital imaging; broadcast journalism; and interactive new media. Students will also develop an awareness of related environmental and societal issues and explore college and university programs and career opportunities in the various communications technology fields. This is a two-credit package course suitable for students interested in digital photography, journalism, layout and design, desktop publishing, marketing, advertising and creating our H.H.S.S. "Highlander" yearbook and memory slideshows.

TGJ4M1/TGJ4M2 - COMMUNICATIONS TECHNOLOGY (Yearbook) (College/University)

Prerequisite: Communications Technology, Grade 11, Parts 1 and 2, College/University Preparation

This course enables students to further develop media knowledge and skills while designing and producing projects in the areas of live, recorded, and graphic communications. Students may work in the areas of TV, video, and movie production; radio and audio production; print and graphic communications; photography; digital imaging; broadcast journalism; and interactive new media. Students will also expand their awareness of environmental and societal issues related to communications technology and will investigate career opportunities and challenges in a rapidly changing technological environment. This is a two-credit package course for students who have excelled in the previous yearbook course and are looking to further enhance their communication technology skills through mentoring others.