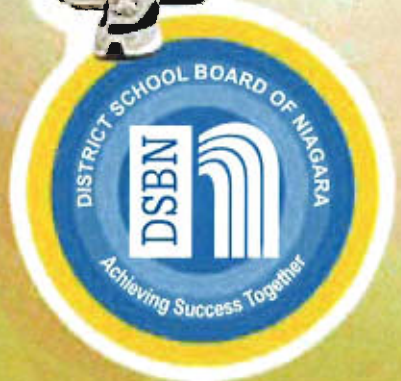


SECONDARY SCHOOL  
**Program & Course**  
CALENDAR



2010 / 2011





# DISTRICT SCHOOL BOARD OF NIAGARA

## Message from the Director...

*The world is changing. With the emergence of new technologies, developing social and economic trends, the contributions of young people have never been more important.*

*This is what makes high school so exciting; it is the opportunity to define, shape and pursue your future goals and ambitions. Whether you choose to enter the world of work after graduation, or continue on to post-secondary education, the experiences you have and the decisions you make during your high school years will undoubtedly play a role in the path you ultimately select.*

*Secondary schools throughout the District School Board of Niagara have always maintained an important focus on academics. Our curriculum is as broad and diverse as the students we serve. Throughout these pages, you will find a full listing of the core and elective courses that will engage you and stimulate new thoughts, ideas and dreams.*

*At the DSBN, the learning experience extends far beyond the walls of your classroom. Through cooperative education, our Specialist High Skills Majors and innovative community partnerships you will gain valuable insight and experience into the world of work. In addition, you will also have the opportunity to make important connections and become indispensable members of your local community by completing volunteer hours with charitable and non-profit organizations in your area.*

*As you delve into this guide and begin to consider your options, I would like to offer you two pieces of advice:*

*Accept new challenges: As you progress throughout your high school career, you will begin to take control of your education and focus on the programs, sports and extra-curricular activities that match your interests and future aspirations. I encourage you to explore these new pathways and to challenge yourself to develop new skills and abilities. Know with confidence that all things are possible if you try.*

*Make a plan: Throughout your high school career, you will be presented with many choices. This course calendar is an important tool for you and your parents to use as a reference and planning guide as you work toward your future goals and aspirations. Take time to consider your overall goals when making course selections to ensure you have the necessary prerequisites for senior level classes.*

*If you have any questions, our experienced and caring staff would be pleased to work with you and your parents to develop a plan that matches your interests and abilities with the appropriate educational offerings.*

Best wishes for future success,

Warren Hoshizaki  
Director of Education



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Check us out on Facebook: DSBN  
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Find the Secondary School Program and  
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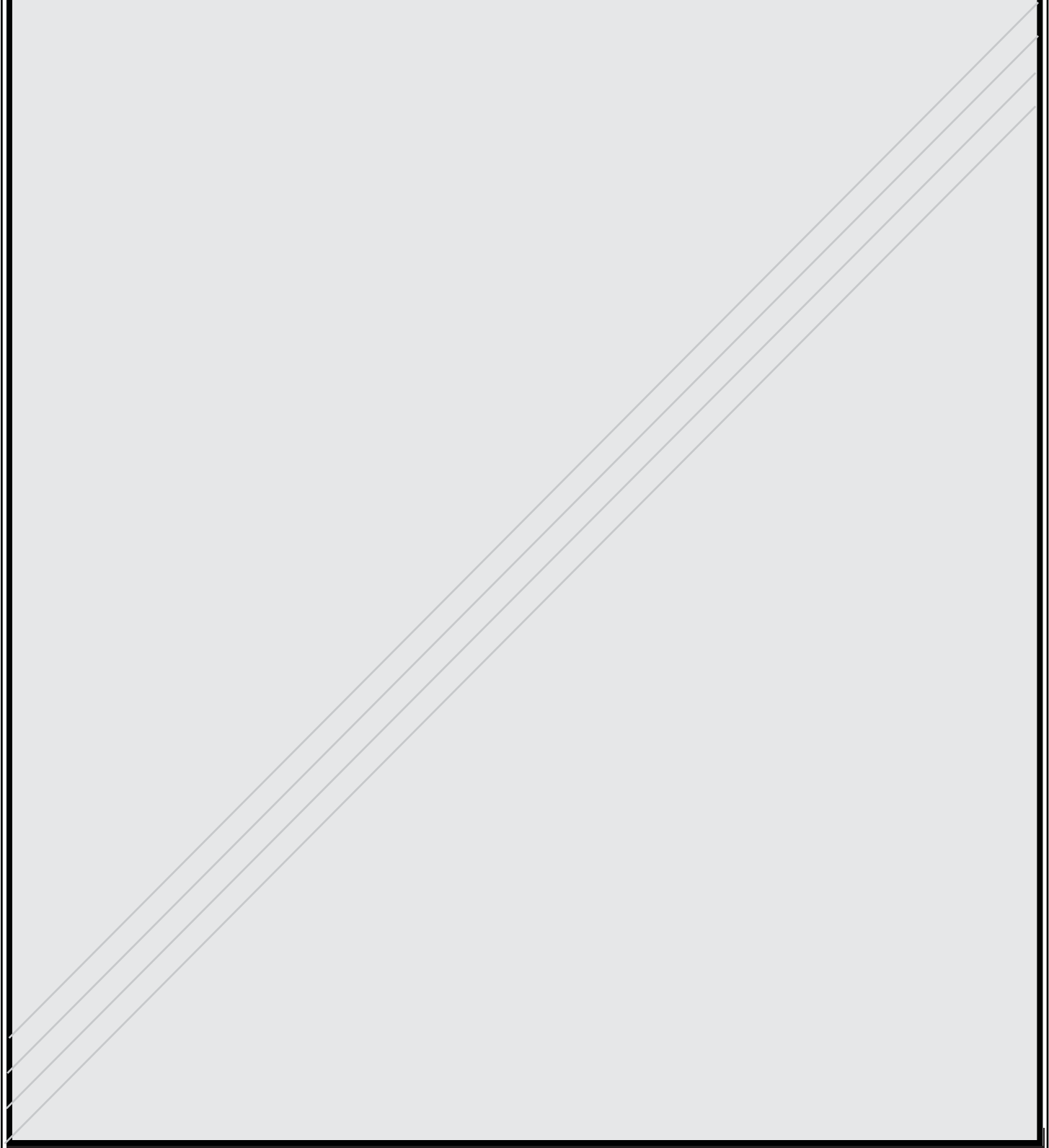
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# Introduction



## GENERAL INFORMATION

### INTRODUCTION

The selection of courses and programs in secondary school depends on a partnership between students, parents and the school.

This Course Calendar will assist students and parents in making those important course and program selections. It is important to emphasize, however, that the Course Calendar is not the only source of information. The schools' teachers, guidance counsellors and administrators can provide valuable assistance in all matters related to course selection, program and career planning. Students and parents are encouraged to seek advice and assistance from these professionals.

*School option/intention sheets and incidence charts describe what courses are offered at each school and each program area. Students and parents should note that course offerings are subject to enrolment.*

This Course Calendar is laid out in three major sections. The first section contains General Information about District School Board of Niagara secondary schools and their services. More specific details may be obtained from each school in the board on these items. The next two sections are set out according to information and requirements for students who enter secondary school in or after September, 1999.

Students who will be in Grade 9, 10, 11 or 12 as of September, 2008 will be subject to the updated diploma requirements of the Ministry of Education, as described in the section for these grades. More details can be found in *Ontario Secondary Schools: Grades 9-12. Program and Diploma Requirements 1999 (OSS)*, copies of which are available from local secondary schools and on the Ministry website at:

<http://www.edu.gov.on.ca>

### OVERALL GOALS AND PHILOSOPHY

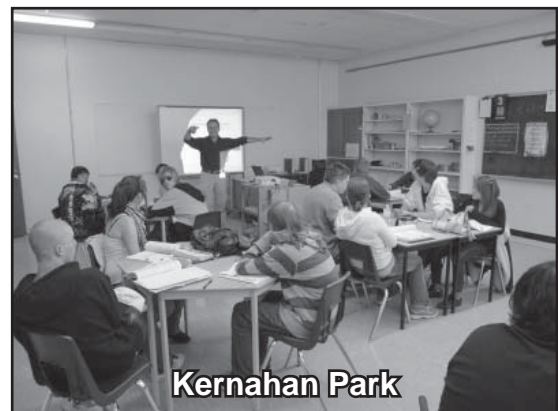
Our secondary school programs are designed to equip students with the knowledge and skills they will need to lead satisfying and productive lives. The programs are intended to prepare students for further education and work, and to assist them in becoming independent, productive, and responsible members of society. The school system of the District School Board of Niagara has been organized to provide as broad a scope of programs as possible to all students and, at the same time, to deal effectively with the special needs and interests of students. Thus, students in each program area have available to them a variety of programs.

In each geographic area (referred to as a program area), the schools and programs are organized to provide students with opportunities to pursue combinations of Academic, Business, and Technological Studies, as well as courses in the Arts, Family Studies, Physical and Health Education and Guidance and Career Education.

Continuing Education programs are available at several sites throughout the Board. These are described in this Calendar, and current information is published several times throughout the year regarding local offerings.

A number of other programs to serve the special needs of small groups of exceptional students are available throughout the Board.

Further details about any programs are available at each secondary school.



**Kernahan Park**

## Introduction

### STUDENT RESPONSIBILITIES AND THE CODE OF CONDUCT

One of the basic aims of schools is to teach the importance of personal responsibility. An awareness of the value of personal responsibility will help students with their relationships with other people. This in turn will help the community and strengthen the country.

The secondary schools in the District Board offer many opportunities for students to gain more experience and an awareness of the value of personal responsibility.

In accordance with the requirements of the Ministry of Education and in order to provide students and parents with a clear understanding of students' rights and responsibilities within the schools of the District Board, the District School Board of Niagara has developed a policy entitled *School Discipline*. Each secondary school, in turn, has established a Student Code of Conduct in a consultative process with staff, School Council and students. The Code of Conduct outlines the rights and responsibilities of the student at the school he/she attends. It provides clear guidelines for acceptable and unacceptable behaviour for all members of the school community, and it is communicated to all members of the school community (students, teachers, staff and parents).

In addition, each school will have a specific set of procedures for dealing with matters of attendance and student behaviour.

At the beginning of each school year, the Student Code of Conduct, Student Evaluation and Promotion Policy and various other procedures will be discussed with students, and copies of the appropriate policies and procedures provided for parents/guardians.

The District School Board of Niagara's commitment to Student Success requires an equal commitment by students to regular attendance, as regular attendance is directly related to achievement.

### EVALUATION OF STUDENT ACHIEVEMENT

Students will be evaluated in a variety of ways, in order to give an accurate picture of what they have learned, and how they have progressed. 70% of a final grade is representative of term work while 30% comes from final summative assessments conducted near the end of a course. Assessment and evaluation will be based on the achievement of the curriculum expectations, as outlined in all courses of study as well as the achievement chart categories and levels.

An evaluation outline for each course in which the student is enrolled is provided at the beginning of the course and copies of these are available to parents/guardians upon request.

Parents will continue to be informed of their child's progress through a regular schedule of report cards. For Grades 9 to 12, a Provincial Report Card will be used to provide information regarding academic progress and learning skills, separately reported in a consistent way throughout all schools. Parents are encouraged to call their school for information or advice on the progress of their child at any time during the school year.

## DIPLOMA REQUIREMENTS

### THE CREDIT SYSTEM

Students entering Grade 9 will proceed through school at a pace which is governed by their success in each subject. A credit is granted in recognition of the successful completion of a course that has been scheduled for a minimum of 110 hours. Students accumulate credits each year towards the 30 credits they will require to obtain a diploma.

### ONTARIO SECONDARY SCHOOL DIPLOMA REQUIREMENTS

The following requirements must be successfully completed in order to obtain an Ontario Secondary School Diploma (OSSD):

- 30 credits (110 hours each), including 18 compulsory credits and 12 options;
- 40 hours community involvement;
- successful completion of the Ontario Secondary School Literacy Requirement.

## COMPULSORY CREDITS

- 4 English (1 per grade)
- 3 Mathematics (1 at the Senior Level)
- 2 Science
- 1 French
- 1 Canadian Geography (Grade 9)
- 1 Canadian History (Grade 10)
- 1 Arts (any of Visual Arts, Music, Drama, Dance)
- 1 Health and Physical Education
- 0.5 Civics
- 0.5 Career Studies
- One additional credit in English, or French as a Second Language, or a Native language, or a Classical or an International language, or Social Sciences and the Humanities, or Canadian and World Studies, or Guidance and Career Education, or Cooperative Education\*
- One additional credit in Health and Physical Education, or the Arts or Business Studies, or Cooperative Education\*
- One additional credit in Computer Studies (Grade 10-12), Science (Grades 11 or 12), Technology (Grades 9 - 12), or Cooperative Education\*

\* A maximum of 2 credits in Cooperative Education can count as compulsory credits.

## OPTIONAL OR ELECTIVE CREDITS

Students must complete a minimum of 12 elective credits selected from those available and those of specific interest to the student and their individual goals for career and future educational programs. These will be selected with the assistance of parents, guidance counsellors, teachers and administrators.

## COMMUNITY INVOLVEMENT

All students entering Grade 9 must complete 40 hours of community involvement during their four years of secondary school in order to obtain an Ontario Secondary School Diploma (OSSD). This diploma requirement is designed to encourage civic responsibility, promote community values, support students' career explorations, develop their interests and skills, and reinforce the importance of volunteering. It will encourage students to develop an understanding of the various roles they can play in their communities, help them to develop a greater sense of belonging within those communities and recognize the positive effects they can have in their communities.

Community involvement must occur *outside* of scheduled instructional time that is part of the normal school day and may include a broad range of “*unpaid*” activities. Students must confirm the prior approval process for an activity with their school.

Students, in collaboration with their parent(s)/guardian(s), are responsible for selecting volunteer activities from the “Eligible Activity List”. Students and their parent(s)/guardian(s) have the responsibility for completing the “Completion of Community Involvement Activities” form and handing it in to the school as required. They are also to ensure that the corresponding, total number of hours is recorded correctly on the report card. The safety of students is paramount. Students with special needs as well as other identified students may have Individual Education Plans (IEPs) that outline accommodations and/or modifications related to this component. Students must also avoid a list of activities that are declared ineligible by the Ministry of Education.

An *Information Manual* is available for students, parents and community members/organizations wishing to sponsor a “Community Involvement” activity. This manual may be obtained from the Principal or Vice Principal of your local community secondary school.

## ONTARIO SECONDARY SCHOOL LITERACY GRADUATION REQUIREMENT

All students who entered Grade 9 in or after the 2000- 2001 school year, are required to obtain the literacy graduation requirement in order to earn the Ontario Secondary School Diploma. They may do so by one of the following means:

### 1. Ontario Secondary School Literacy Test:

Students who are working towards the OSSD will normally take the OSSLT when they are in Grade 10. This literacy test assesses the literacy skills of students in Ontario for the purpose of determining whether students meet the provincial secondary school literacy requirement for graduation. Students not taking this literacy test in Grade 10 will require a deferral granted on the basis of Ministry policy. Students who do not successfully complete the literacy test will have opportunities to retake the test in Grade 11 and Grade 12.



### 2. Ontario Secondary School Literacy Course:

Students qualify to enrol in the OSSLC when they have had two opportunities to take the OSSLT and have failed the OSSLT at least once, or if the principal determines that it is in the best educational interests of the student. This means that students are eligible to enrol in the OSSLC **before** they have had their second opportunity to take the test. The students also qualify to enrol in the OSSLC if the accommodation required in a student's IEP were not available on the day the OSSLT was administered. The reading and writing competencies required by the OSSLT form the instructional and assessment core of this course. Students who pass the course are considered to have met the literacy graduation requirement. The OSSLC can be used to fulfil the compulsory English requirement for either Grade 11 or Grade 12 although it may not be accepted as the Grade 12 English entrance requirement for university of college programs.

If used to meet the Grade 11 requirement, the course is coded OLC30. If used to meet the Grade 12 requirement, the course is coded OLC40. The credit may also be used to meet the group 1 compulsory credit requirement for the Ontario Secondary School Diploma. Students may not challenge the OSSLC for credit.

### 3. Adjudication Process:

In rare cases, a student might have, through no fault of his/her own, not been able to take advantage of the normal opportunities to write the OSSLT and/or have not been able to enrol in or complete the OSSLC, owing to unforeseen circumstances. If such a student would otherwise be eligible to graduate in June, he/she would be granted this additional opportunity to meet the literacy graduation requirement. Similarly, students with an IEP who did not have access to the documented accommodations when taking the OSSLT are also eligible for the adjudication process. This process establishes a Board adjudication panel at the end of the school year to review samples of the student's work to determine if they provide evidence that the student has met the literacy requirements for graduation.

## ONTARIO SECONDARY SCHOOL CERTIFICATE REQUIREMENTS

The Ontario Secondary School Certificate will be granted on request to students who leave school before earning the Ontario Secondary School Diploma, provided that they have earned a minimum of 14 credits distributed as follows:

### Compulsory Credits (total of 7)

- **2 credits** in English
  - **1 credit** in Mathematics
  - **1 credit** in Science
  - **1 credit** in Canadian History
- OR**
- **1 credit** in Canadian Geography
  - **1 credit** in Health and Physical Education
  - **1 credit** in the Arts
- OR**
- **1 credit** in Technological Education

## THE CERTIFICATE OF ACCOMPLISHMENT

Students who leave school before fulfilling 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 vocational programs or other kinds of further training, or who plan to find employment after leaving school.

Students who return to school to complete additional credit and non-credit courses will have their transcript updated, but will not be issued a new Certificate of Accomplishment.

## SUBSTITUTION FOR COMPULSORY CREDITS

Substitution for compulsory credits may be possible. Information about substitution procedures may be obtained from the Guidance Department at the secondary school involved. Parental approval is required for students under the age of 18.

Beginning in September 2005, the range of courses that may be used through substitution to meet a compulsory credit requirement (see Section 3.2 and Appendix 5 of OSS) has been extended to include:

- Learning Strategies 1, Grade 9, Open (GLS10, GLE10, GLE20)
- Discovering the Workplace, Grade 10, Open (GLD20)
- Designing Your Future, Grade 11, Open (GWL30)
- Leadership and Peer Support, Grade 11, Open (GPP30)
- Advanced Learning Strategies, Grade 12, Open (GLS40)
- Navigating the Workplace, Grade 12, Open (GLN40)

A **maximum of one credit earned for a learning strategies** course may be used through substitution to meet a compulsory credit requirement. In addition, a **maximum of three substitutions** may be made.

### CREDIT FOR EXTERNAL CREDENTIALS

Students are given credit for selected learning that they pursue outside their secondary school program. Certification from specific, recognized institutions such as conservatories of music, can count as **optional credits** toward a high school diploma. Beginning January, 2004, the external music credits accepted for credits towards the OSSD are:

1. **one non-Grade 12 university/college credit** (AMX3M) for
  - Grade VII Practical and Grade I Rudiments of the Royal Conservatory of Music, Toronto
  - Grade VIII Practical and Grade III Theory of Conservatory Canada, London
2. **one Grade 12 university/college credit** (AMX4M) for
  - Grade VIII Practical and Grade II Rudiments of the Royal Conservatory of Music, Toronto
  - Grade VIII Practical and Grade IV Theory of Conservatory Canada, London

### ONTARIO SCHOOL RECORDS (OSR)

An Ontario School Record (OSR) is maintained for each student. This record is a basic element in the process of monitoring a student's progress through school. Once a student's progress and achievement have been measured and assessed, they are recorded in the OSR. Other data recorded are: date of birth, Social Insurance Number, Ministry of Education Number and/or the Ontario Education Number, schools attended, names of parents/guardians.

A student and his/her parents may have access to the student's OSR. It is not available to other students, parents or individuals. For more information about this, please call the Guidance Department.

### ONTARIO STUDENT TRANSCRIPT (OST)

The Ontario Student Transcript (OST) is a record of courses successfully completed.

As students earn credits in Grades 9-12, their personal achievement for each course is recorded on this form as a percentage grade.

Transcripts for current students in day school programs are available through the Principals at each school. After the student leaves school, the Ontario Student Transcript will be kept on file in the *last secondary school attended for 5 years* and a copy will be provided to the student upon graduation or leaving school. The record is maintained in case he/she ever needs an official report of marks, such as would be required by any college, university or employer. Marks will not be released by the school without the permission of the student or of the parent/guardian if the student is under 18.

Students not enrolled in day schools but enrolled in Community Education classes can contact the office at (905) 687-7000 for report cards and transcripts. Former students whose records are inactive, and not at the former school site, can request transcripts and school records by calling (905) 641-2929, extension 54157. Proof of identification and a nominal fee will be required to process requests.

## Introduction

### FULL DISCLOSURE - ONTARIO STUDENT TRANSCRIPT

The following procedures will be used upon withdrawal from a course and repetition of a course.

#### ◆ **Withdrawal from a course**

##### *Grades 9 and 10*

Withdrawals from grade 9 and 10 courses are not recorded on the OST. Only successfully completed courses are recorded on the OST (Ontario Student Transcript).

##### *Grades 11 and 12*

If a student (including a student with a completed Individual Education Plan) withdraws from a Grade 11 or 12 course within five instructional days following the issue of the first report card in a semestered or a non-semestered school, the withdrawal is not recorded on the OST.

If a student withdraws from a course after five instructional days following the issue of the first report card in a semestered or a non-semestered school, the withdrawal is recorded on the OST by entering a “W” in the “Credit” column. The student’s percentage grade at the time of the withdrawal is recorded in the “Percentage Grade” column.

#### ◆ **Repetition of a course**

Students who repeat a Grade 11 or 12 course that they have previously completed successfully, can earn only one credit for the course. However, each attempt and the percentage grade obtained is recorded on the OST, and an “R” is entered in the “Credit” column for the course(s) along with the lower percentage grade.

For more information regarding these policies, see the Guidance personnel in your school.

### PLAR CHALLENGE PROCESS

The Prior Learning Assessment and Recognition (PLAR) challenge process allows students who have acquired knowledge and skills outside an Ontario secondary school to have their skills and knowledge evaluated against the expectations outlined in provincial curriculum policy documents in order to earn credits towards the secondary school diploma. Grade 9 courses may not be challenged. Students may earn up to four credits through the challenge

process, with a maximum of two credits in any given discipline. All credits granted through the PLAR process represent the same standards of achievement as granted to students who have taken the course.

Students may not challenge for credit for the following:

- a course for which a credit has already been granted or for which there is significant overlap with a course for which credit has been granted;
- a course in any subject if a credit has already been granted for a course in that subject at a later grade;
- a course a student has previously taken and failed;
- a transfer course, a locally developed course or a cooperative education course;
- a course in English as a Second Language (ESL) or English Literacy Development (ELD) if the student has already earned a credit from a course included in the English curriculum policy document;
- a course in French as a Second Language if a student has already earned a credit from a course included in the Français curriculum policy document.

Students who are interested in initiating the challenge process will be required to submit their application along with appropriate supporting documentation prior to being accepted. (Students under the age of 18 must have parental approval.) If it is determined that the student has presented reasonable evidence for success, the challenge may proceed to the next step. Assessment and evaluation will include formal testing (balance between written work and practical demonstration) that will account for 70% of the final mark and a variety of other assessment strategies appropriate for the course that will account for 30% of the final mark. Specific details regarding the challenge process will be available through the guidance office or Principal.

### PLAR EQUIVALENCY PROCESS

Students who are eligible for equivalency credits are those who transfer to Ontario secondary schools from non-inspected private schools or schools outside Ontario. Equivalency credits are granted for placement only. The principal of the receiving school will, in the process of deciding where the student should be placed, determine, as equitably as possible, the total credit equivalency of the student’s previous learning, and the number of compulsory and optional credits still to be earned. Principals will use OSS, Appendix 8 as their guide in this process. The

guiding principle of this process is that all credits must represent the same standards of achievement as credits granted to students who have taken the Ministry approved courses for Ontario.

## STUDENT SUCCESS

### OVERVIEW OF SUPPORTS FOR STUDENT SUCCESS

The Ministry of Education “Student Success” initiative ensures additional support to students in our schools. The focus of the support is to improve the literacy and numeracy skills of all students; to ensure a smooth transition from Grade 8 - 9 and then from secondary school to work place; and to develop programs within schools which prepare students for their selected destination in the workforce. The District School Board of Niagara’s 22 secondary schools are dedicated to fulfilling the Board’s Mission Statement:

*“We are committed to student success by working together to inspire and empower all learners to reach their full potential”.*

Our secondary schools provide a range of innovative programs and supports that help students to earn the credits they need to graduate. These programs include:

- **Student Success Teams** - In each secondary school a Student Success Teacher and the Student Success Team work with school staff, parents and the wider community to ensure that together, they help more students earn the credits necessary to graduate.
- **Credit Recovery** - In each secondary school special classes have been created to give students who have not been successful the opportunity to gain the credits they have missed.
- **Specialist High Skills Major** - By making courses more relevant to students, they get a better understanding of a subject because they learn it in a real work environment. Each major is a bundle of 8 to 10 courses, part of the overall 30 credits needed for graduation. Secondary schools in the District School Board of Niagara are currently offering a Ministry-approved Specialist High Skills Major in the Arts, Construction, Energy, Hospitality and Tourism, Horticulture,

Information and Communications Technology, Manufacturing, Transportation and Welding sectors. See page 10 for more detailed information.

- **Lighthouse Projects** - Lighthouse projects help students stay in school, accumulate needed credits, take programs linked to colleges and encourage youth who have left school to return. These programs are offered at selected sites in the District School Board of Niagara. See your school’s Guidance Counsellor for more details.
- **Expanded Cooperative Education Credit** - Cooperative Education is a great way to learn skills and gain experience from the workplace. For more details, see Cooperative Education below.
- **Dual Credit Program** - With the new Dual Credit Program, high school students can earn up to 4 optional credits by participating in apprenticeship training and college preparation courses. These courses count towards both their high school diploma and their post secondary education or apprenticeship certification.
- **Grade 8 to 9 Transition** - Making the move from elementary to high school can be challenging for some students. Increased attention and programming tailored to fit the needs of the individual student will provide the support they need to make a smooth transition. See your Guidance Counsellor for more details.

### ALTERNATIVE EDUCATION PROGRAMS

Alternative Education programs are for students who have become disengaged from school, are experiencing some barriers to success at school, or perhaps have been out of school for a period of time. Alternative programs provide learning support, encouragement, and develop a student’s capacity and motivation to learn. Programs focus on both academic and non-academic needs of students including social skills and employment skills. Referrals must be made by the home school Principal. Alternative programs are “transitional” in design supporting the return of the student to his/her home school.

Programs are in place in Beamsville, Fort Erie, Niagara Falls, Niagara-on-the Lake, Port Colborne, Sherkston, St. Catharines, Thorold, and Welland.

## Introduction

- **The BRIDGE Program** - For students who are at risk of school failure due to any combination of attendance, motivation, social, emotional or behavioural concerns; typically grade 6,7 or 8.
- **The OASIS Program** - For students who are age appropriate to enter secondary school but need to further develop literacy, numeracy and social skills. The program is hosted in a secondary school to support the transition when the student is best prepared for success.
- **The First Chance Program** - A regional program providing opportunities for students 14 – 15 years of age who have less than 4 credits and who are significantly at risk of disengagement from school.
- **The Second Chance Program** - A regional program providing opportunities for students 16-18 years of age who have less than 14 credits and who are significantly at risk of disengagement from school.
- **College Link** - The program is intended for students 17 - 20 years of age who have completed all of their compulsory credits in grades 9 and 10 BUT who are experiencing various issues that have hindered their progress in a regular school setting.
- **Connecting to College** - The program is for students who are at risk of not graduating (minimum of 24 credits), but interested in attending college. The student will attempt two dual credits at Niagara College while attending their home school.
- **Courage to Soar** - A program for mature or adolescent students aged 17+ who need an alternative to the high school setting. Aboriginal and non-aboriginal students are welcome. Cooperative education credits may be available.
- **EdVance** - An alternative program for students 19 – 20 years of age who have been out of school. Applicants should call the Lifetime Learning Centre.
- **Militia COOP** - A full day program designed for students aged 16 years, with a minimum of 15 credits, who wish to experience Militia training and Military life.
- **Niagara Link** - A program designed for Early School Leavers 18 – 21 years of age (with 22+ credits) who wish to continue their education. The program includes OSSD credits and one general education College course.

- **Rural COOP** - An online full time agricultural Co-op Program for rural students who require credits to graduate and have an interest in rural activities.
- **Young Mom's Outreach Program** - This program in partnership with Adolescent Family Support Services of Niagara (A.F.S.S.N.), provides opportunities for young mothers to continue their education while their children are provided the appropriate child-care.

## COOPERATIVE EDUCATION

- Cooperative Education is a planned learning experience, for which credits are earned, that integrates classroom theory and learning experiences at a workplace to enable students to apply and refine the knowledge and skills acquired in a related course. Cooperative Education placements are arranged for students by their school and must follow Ministry of Education policy and guidelines.
- The Cooperative Education course consists of a classroom component and a workplace component. The classroom component includes 15 to 20 hours of pre-placement instruction on topics such as: self-assessment, résumé writing, interview skills, health and safety, etc. The workplace component requires students to be at a work site for approximately 3 hours per day (morning or afternoon) for a semester (i.e. September to January or February to June).
- Classroom sessions are held on a regular basis throughout the placement to provide opportunities for students to reflect on and reinforce their learning in the workplace.
- Cooperative Education credits may be used to meet up to two of the 18 compulsory credit requirements for the Ontario Secondary School Diploma (OSSD)
- Cooperative Education credits may be used in the calculation of a student's grade average but can't be applied towards the 6 U level credits required for entrance to a university.

For more information go to:

[www.dsb.org/co-op](http://www.dsb.org/co-op)

## ONTARIO YOUTH APPRENTICESHIP PROGRAM (OYAP)

### “Apprenticeship IS Postsecondary Education!”

The Ontario Youth Apprenticeship Program (OYAP) opens the door to apprenticeship in a wide range of exciting careers. If you are entering Grade 11 and are at least 16 years old, you can work towards a career in a skilled trade as a registered apprentice, and eventually a certified skilled worker or journey person, while you complete your Ontario Secondary School Diploma (OSSD) at the same time.

OYAP helps young people obtain placements in more than 140 skilled trades that can be learned through apprenticeship training. OYAP students register as apprentices and begin their formal apprenticeship training while they are still in secondary school. With both a diploma and the skills to get the job done when they graduate, these students have a big head start.

After being hired, many apprentices will, because of their skills, be asked to train new apprentices, or will find opportunities to manage operations, start their own businesses, or use their experience as a base for technological or engineering studies at a college or university.

Students who are interested in pursuing apprenticeship education should first explore technological education courses offered throughout the DSBN. To participate in OYAP, students will need to take cooperative education during their senior years. All OYAP placements must provide appropriate training, supervision, and evaluation. A certified journey person provides the placement component – apprenticeship on-the-job training – according to the regulations of the trade. If the employer and student agree to the program, a Training Consultant from the Ministry of Training, Colleges and Universities may sign the student to an apprenticeship at any time during the co-op placement. All cooperative education hours will then count towards the total apprenticeship hours required. Employers who employ an OYAP student after graduation may be eligible for a wage subsidy.

The schools of the District School Board of Niagara have established a wide variety of local partnerships, particularly with employers who can provide placements in apprenticeship occupations. Students enrolled in OYAP earn cooperative education credits in accordance with all prescribed policies and procedures outlined by the

Ministry of Education and OYAP guidelines established by the Ministry of Training, Colleges and Universities (MTCU). The approved training standards of the Ministry of Training, Colleges and Universities must complement, or serve as the basis for, the student’s personalized placement learning plan.

OYAP is open to *all* students who are at least 16 years of age, are enrolled as a full time student and have completed the credit requirements for Grade 10 (or equivalent). All forms of Cooperative Education and work experience will include the following:

- pre-placement instruction;
- provision of Workplace Safety and Insurance Board coverage, as described in the Policy/Program Memorandum No.76a, “Workers’ Compensation Coverage for Students in Work Education Programs”;
- a learning plan based on the curriculum expectations of courses in the provincial curriculum policy documents and on the expectations of participating employers;
- assessment of students progress through regular monitoring of their learning in the workplace setting;
- opportunities for students to analyze their out-of-school experiences and to integrate them with their in-school learning;
- evaluation of students’ learning to determine whether course expectations have been met.

What is the purpose of starting Apprenticeship Training while in Secondary School?

- students will start learning skills in their chosen skilled trade.
- students have an opportunity to gain valuable training hours, which can be applied toward their post secondary apprenticeship training.
- students become involved in an occupation that is of interest to them.
- students can network with and learn from professionals working in their trade.

Many of the trades offer excellent employment opportunities. Students are encouraged to explore their Skilled Trades and Technologies career options. Students can start by visiting [www.dsbni.org/OYAP](http://www.dsbni.org/OYAP) where they will find job descriptions, links to local labour market forecasts, news articles and more.

## Introduction

A variety of industry-recognized certifications and awareness training may also be available to students through OYAP such as: Workplace Hazardous Materials Information Systems (WHMIS), Fall Arrest, Traffic Control, First Aid, Ontario Superhost, Service Excellence, Smart Serve.

For a complete list of apprenticeships or for further information, please visit:

**[www.dsbno.org/OYAP](http://www.dsbno.org/OYAP)**

To discuss OYAP options further, students are encouraged to contact their:

- Guidance Counsellor;
- Technological Education Teacher;
- Cooperative Education Teacher; or
- Experiential Learning Coordinator

### **SPECIALIST HIGH SKILLS MAJOR (SHSM)**

Specialist High Skills Major (SHSM) programs continue to experience tremendous growth within the DSBN. In just three years we have expanded from piloting the Ministry of Education's first Construction SHSM to offering the students at the District School Board of Niagara the choice of 29 SHSM programs at 17 different secondary schools and 2 Regional programs. Our students participating in these programs are experiencing tremendous accomplishment with a 2008-2009 credit success rate of 95.4%. DSBN students can focus on a career path that matches their skills and interests in the following 9 sectors:

- Arts and Culture
- Construction
- Energy
- Horticulture
- Hospitality and Tourism
- Information and Communications Technology
- Manufacturing
- Transportation
- Welding

Our Regional programs invite students from across the board to spend their days outside the traditional classroom setting. The students in the SHSM Regional Construction program spend a semester building a house from the ground up in partnership with Mountainview Homes

or Habitat for Humanity Niagara. Students then return to their individual schools to complete the remaining components of their SHSM. Our most recent Regional program is an SHSM in Horticulture. Students will experience the Horticulture sector while learning and working for a semester on site at the Niagara Parks School of Horticulture.

### **What is a Specialist High Skills Major?**

The Specialist High Skills Major (SHSM) is a ministry-approved specialized program that allows students to focus their learning on a specific economic sector while meeting the requirements for the Ontario Secondary School Diploma (OSSD) and assists them in their transition from secondary school to apprenticeship training, college, university, or the workplace. An SHSM enables students to gain sector-specific skills and knowledge in the context of engaging, career-related learning environments and helps them focus on graduation and on pursuing their postsecondary goals.

Every SHSM must include the following five components:

1. A bundle of 8–10 Grade 11 and Grade 12 credits that includes:
  - 4 major credits that provide sector-specific knowledge and skills;
  - 2-4 other required credits from the Ontario curriculum;
  - 2 cooperative education credits that provide authentic learning experiences in a workplace setting, enabling students to refine, extend, and practise sector-specific knowledge and skills.
2. Sector-recognized certifications and/or training courses
3. Experiential learning and career exploration activities within the sector
4. "Reach Ahead" experiences connected with the student's chosen postsecondary pathway
5. Development of Essential Skills and work habits required in the sector, and the use of the Ontario Skills Passport (OSP) for purposes of documentation

## HOW WILL THE SPECIALIST HIGH SKILLS MAJOR BENEFIT STUDENTS?

- An SHSM allows a student to experience a range of customized, career-focused learning opportunities. It enables a student to take courses in an area of interest related to a particular sector while working towards a OSSD.
- The focused learning experiences of an SHSM program give students the opportunity to explore, identify, and refine career goals and make informed decisions related to postsecondary education, training, and next steps towards a career.
- The Experiential Learning opportunities provided in an SHSM enable students to refine their skills and improve their work habits, gain confidence in their ability to succeed, and see the connections between their studies, the world beyond high school and their future careers. Students are also able to begin to establish relationships and networks in their chosen fields.
- Students who graduate with an SHSM can look forward to improved prospects after secondary school; because of the recognition and support for the SHSM framework content from a variety of representatives from the economic sector, apprenticeship training programs, colleges and universities.

## COMPONENTS OF A SPECIALIST HIGH SKILLS MAJOR (SHSM)

### 1. Bundled Credits

Each SHSM has a bundle of 8-10 required Grade 11 and Grade 12 credits depending on the sector and/or pathway for each of the four postsecondary destinations. Students take courses specific to their major while fulfilling the requirements of their Ontario Secondary School Diploma (OSSD). Courses can be selected to satisfy requirements for entry into the postsecondary education option of each student's choice (Apprenticeship, College, University, Workplace).

### 2. Sector-Recognized Certifications and Training Programs

Certifications and Awareness Training Programs, especially those addressing safety, are important for students. In addition to the Major courses and the Experiential Learning components of the Specialist High Skills Major

(SHSM), sector-related certifications and training programs enable students to acquire the knowledge and skills related to safe work habits. In addition, sector-recognized certifications provide SHSM students with an advantage when entering the workplace.

*Important Note: certifications and workplace-related health and safety courses taken as part of the SHSM program do not remove the obligation of the employer to provide workplace-, site-, and equipment-specific training. Ontario employers are obligated under the Occupational Health and Safety Act to provide workplace-specific health and safety training to every worker and to ensure that workers are aware of hazards, processes, procedures and rules related to safety in their workplace. SHSM certifications and training programs are a complement to – but not a replacement for – the health and safety training obligations of employers.*

### 3. Experiential Learning Activities

Experiential learning consists of planned learning experiences that take place outside of the traditional classroom setting. Credits in the Specialist High Skills Major (SHSM) framework must include Experiential Learning opportunities for students so they can connect their learning in school to work in the sector. Experiential Learning can include job shadowing, job twinning and work experiences.

### 4. “Reach Ahead” Experiences

Students in the Specialist High Skills Major (SHSM) program have opportunities for learning experiences directly related to their desired postsecondary destination. Experiences can range from a few hours in length to the time necessary for a full course, and may include:

- job-shadowing someone for a day or more in a career the student is considering;
- attending a number of college or university classes in his/her area of interest and/or;
- attending a conference or workshop held by the economic sector in his/her SHSM.



## Introduction

### 5. Development of Essential Skills and Work Habits required in the Sector

The Ontario Skills Passport (OSP) Work Plan is used to identify and track students' demonstration of essential skills and work habits during their work experiences in their sector, and to plan further skills development.

Human Resources and Social Development Canada (HRSCD) has identified and validated the essential skills needed for life, learning and work. These skills are transferable from school to work, job to job and sector to sector. They enable people to perform tasks required in their jobs and to participate fully in the workplace and community.

For more information please visit [www.dsb.org/TechEd](http://www.dsb.org/TechEd) or contact your technology teacher or SHSM Facilitator at 905-227-5551 and ask how you can qualify for a Specialist High Skills Major.

### AMBASSADORS FOR CONSERVATION OF ENERGY (ACE) PROGRAM

The DSBN is one of only a few school boards in Ontario that is offering the newest SHSM sector – Energy. With the continued interest and growth in Energy Conservation many students are considering careers in this emerging sector. The Ontario Power Authority has added their support to our SHSM Energy by backing the ACE program (Ambassador for the Conservation of Energy). The DSBN's ACE and SHSM Energy programs work in tandem to help students experience the many facets of Energy Conservation. Students will learn about electricity with a focus on energy conservation and renewable energy technologies. Students will become "Ambassadors for Conservation of Energy" by delivering the message of conservation to younger students and the community as a whole.

For more information please visit [www.dsb.org/ACE](http://www.dsb.org/ACE) or contact your technology teacher or the ACE Co-ordinator at 905-227-5551.

### THE SPECIALIZED SCHOOL-TO-WORK PROGRAM

This program has been designed for students who would benefit from:

- smaller class sizes;
- personalized instruction to assist with academic difficulties;
- working on English and Mathematics expectations that are more suited to the world of work;
- accommodations to the curriculum;
- a more hands-on learning experience.

For more information, please feel free to contact the Secondary Schools offering the Specialized-School-To-Work program:

- Beamsville District Secondary School
- Eastdale Secondary School
- Fort Erie Secondary School
- Kernahan Park Secondary School
- Port Colborne High School
- Stamford Collegiate

## OTHER BOARD SUPPORTS

### GUIDANCE AND CAREER EDUCATION

The guidance and career education program is a vital and integral part of the secondary school program. The goals of the guidance and career education program are outlined in the policy document entitled *Choices Into Action: Guidance and Career Education Program Policy for Elementary and Secondary Schools, 1999*. The content of the program is organized into three areas of learning - **student development** (i.e. the development of habits and skills necessary for learning), **interpersonal development** (i.e. the development of knowledge and skills needed in getting along with others), and **career development** (i.e. the development of knowledge and skills needed for setting short and long term goals and for planning the future).

Each school in the District School Board of Niagara will have a Guidance and Career Education Program Plan on file. All students in the District School Board of Niagara participate in self-awareness, educational planning and career research activities through their guidance

departments. These activities are consistent throughout the District School Board of Niagara. Resources are available in the guidance areas of each school.

### COUNSELLING

An important service offered is that of individual counselling. Students are encouraged to request an appointment with a counsellor whenever they feel it would be helpful. Counselling services includes advice and counselling regarding program choice, career and/or postsecondary educational planning, as well as personal issues.

Other services provided by guidance counsellors are directed toward providing clearer communication to all those involved in the student's education.

All possible program planning will be explored so that the student has the option to pursue postsecondary avenues appropriate to his/her academic ability, interests and values. The value of all destinations is the basis of all counselling and of all career education programs. Through direct contact, interview nights, and other special programs, guidance counsellors are also available to parents/guardians for consultation throughout the year.

### THE ANNUAL EDUCATION PLAN

Each student, Grade 7 through to Grade 12 in the District School Board of Niagara has an Annual Education Plan (AEP) which includes the student's goals for academic achievement and for learning both inside and outside of school. Developing an AEP will help students take responsibility for their education, make informed decisions, and plan for the future.

### COMPUTERS IN OUR SCHOOLS

In all schools, there are computers available to students in labs, classrooms and the Library for completion of classroom assignments and research. These computers provide students with access to the Internet, on-line encyclopedias, curriculum-based software titles and FirstClass (the DSBN communication and collaboration tool).

### THE LIBRARY INFORMATION CENTRE

Strong information and critical literacy skills are essential for our 21st century students. Information literacy is defined as "the ability to acquire, critically evaluate, select, use, create and communicate information in ways which lead to knowledge and wisdom" (Information Literacy and Equitable Access: Ministry of Education and Training, 1995.) School library resources, both digital and print, are selected to support and enrich the curriculum and are used by school staff to develop students' information and critical literacy skills.

Students are given the opportunity to access a wide range of resources through the library information centre and they are supported by library staff in developing the skills and knowledge of information technologies. The library information centre, therefore, serves a vital role in supporting student achievement.

### SPECIAL PROGRAMS

- eLearning
- English as a Second Language Programs
- Heritage Language Programs
- The Extended French Program
- Performing Arts
- Native Studies
- Other Experiential Programs

### eLEARNING

The District School Board of Niagara eLearning and Program offers online education in a secure environment. Using resources developed by eLearning Ontario, online teachers engage students using a variety of web based tools, while giving the learner the flexibility needed to succeed.

Online learning provides a number of unique experiences for students, including:

- allowing students to learn in a more independent, flexible environment;
- supporting inquiry and project-based learning;
- developing skills required for learning in the 21st Century.

The District School Board of Niagara offers a number of eLearning courses each year. Additional eLearning courses are made available to students through the Ontario eLearning Consortium.

## Introduction

If you would like to take an online course, please see your Guidance Counsellor. Your Guidance Counsellor will work with you to ensure you have the necessary program prerequisites, access to the required hardware and software, a course mentor and in-school supports for you to succeed.

For more information, please go to the DSBN eLearning website:

**[www.dsbn.edu.on.ca/eLearning](http://www.dsbn.edu.on.ca/eLearning)**

The following eLearning courses may be offered by the District School Board of Niagara.

BAF 3M - Financial Accounting Fundamentals  
BAT 4M - Financial Accounting Principles  
CHV 2O - Civics  
CIA 4U - Analysing Current Economic Issues  
CLN 4U - Law  
ENG 4U - English 4U  
ENG 4C - English 4C  
HSB4M - Challenge and Change in Society  
HZT4U - Philosophy: Questions and Theories  
GLC 2O - Career Studies  
SES 4U - Earth and Space Science

Students may be able to access the following eLearning courses offered by the Ontario eLearning Consortium.

ASM2O - Media Arts  
BBB4M - International Business Fundamentals  
BDV4C - Entrepreneurial Studies: Venture Planning  
BTA3O - Information Technology Applications in Business  
CGF3M - Physical Geography: Patterns, Processes and Interactions  
CGG3O - Travel and Tourism  
CGR4M - Environmental Geography  
CGW4U - Canadian and World Issues: A Geographic Analysis  
CHA3U - American History  
CHI4U - Canada: History, Identify, and Culture  
CHY4U - World History: the West and the World  
CLU3E - Understanding Canadian Law  
CLU3M - Understanding Canadian Law  
EMS3O - Media Studies  
ENG3E - English  
ENG3U - English  
ENG4E - English  
EWC4U - The Writer's Craft

FSF4U - Core French  
GWL3O - Designing your Future  
HHS4M - Individuals and Families in a Diverse Society  
HRT3M - World Religions  
HSB4M - Challenge and Change in Society  
ICS3U - Computer Information Science  
ICS4U - Computer Information Science  
MAT1L - Mathematics  
MAT2L - Mathematics  
MCT4C - Mathematics for College Technology  
MCV4U - Calculus and Vectors  
MDM4U - Mathematics of Data Management  
MEL3E - Mathematics for Everyday Life  
MEL4E - Mathematics for Everyday Life  
MFM1P - Foundations of Mathematics  
MFM2P - Foundations of Mathematics  
MHF4U - Advanced Functions  
MPM1D - Principles of Mathematics  
MPM2D - Principles of Mathematics  
PPZ3O - Health for Life

**Prior to involving a student in an eLearning course outside the DSBN, schools need to contact the Board's eLearning Co-ordinator.**

### ENGLISH AS A SECOND LANGUAGE

Two secondary schools in the District Board offer student access to English as a Second Language (ESL) and English Literacy Development (ELD) support. Courses in these areas are meant to support students whose first language is other than English or is a variety of English that is significantly different from the variety used in Ontario's schools, and who may require educational interventions to assist them in attaining English language proficiency. Students may substitute up to 3 ESL/ELD credits for compulsory English credits. They must earn the fourth compulsory credit in English at the Grade 12 level.

English as a Second Language credit courses are available for adolescents at St. Catharines Collegiate in St. Catharines and Westlane Secondary School in Niagara Falls.

Non-credit courses are available for adults in St. Catharines through the Multicultural Centre at 85 Church Street, St. Catharines, Tel: 905-685-6589. Individuals in Welland, Niagara Falls and Fort Erie can request information from the Welland Heritage Council office at 26 East Main Street, Welland, Tel: 905-732-5337.

## HERITAGE LANGUAGES

Heritage language non-credit courses are offered in cooperation with the St. Catharines Folk Arts Council and its affiliated ethnic groups. Many different languages are offered - Arabic, Armenian, Chinese, German, Greek, Hebrew, Hindi, Korean, Polish, Spanish, Ukrainian.

## THE EXTENDED FRENCH PROGRAM

Four centres are provided for the Extended French Program: A.N. Myer Secondary School in Niagara Falls, Welland Centennial Secondary School in Welland, Sir Winston Churchill High School in St. Catharines and Grimsby Secondary School in Grimsby. Transportation is provided to these centres for eligible students. Students in Grades 9&10 study Mathematics, Science, Extended French Language Arts, History, Geography, Civics and Career Studies. Grades 11&12 Extended French Language Arts courses, along with additional courses, are also offered. Slight variations of the above may occur from school to school. In all these subjects, French is the language of instruction. Students study the remaining subjects in English.

## PERFORMING ARTS

The District School Board of Niagara features special programs in the Performing Arts. The Academy for the Arts (DNA Arts), located at Laura Secord Secondary School, offers intensive programs for interested and talented arts students in the Niagara Region. These programs provide students with an opportunity to concentrate their studies in an arts discipline - Dance, Drama, Music, Visual Arts, Music Theatre for up to one third of the credits required for the Ontario Secondary School Diploma.

The Academy program is professionally and academically oriented, emphasizing the arts as a viable and rewarding career pursuit. Postsecondary plans at a College or University is the next step for most students.

Students enrolled in schools within the District School Board of Niagara may apply. Students are admitted by audition and interview, a process that places them in the right academy program and confirms their intention to study the arts. Experience is helpful but not necessary; commitment and potential are essential.

More information is available from each school's Guidance Department.

## NATIVE STUDIES

The District School Board of Niagara offers both Intermediate and Senior courses in Native Studies. These courses provide students with a broad range of knowledge related to Aboriginal peoples to help them better understand Aboriginal issues of public interest discussed at the local, regional and national levels. Students will develop the skills necessary to discuss issues and participate in public affairs. Through their involvement in Native Studies, they will increase their awareness and understanding of the history, cultures, world views, and contributions of Aboriginal peoples in Canada.

## OTHER EXPERIENTIAL PROGRAMS

### ◆ Army Reserve Co-op

This is a full day, one semester program, offered in partnership with the Canadian Armed Forces which operates from the Lake Street Armoury in St. Catharines. Two academic credits are earned in a combination of senior Canadian and World Studies, and Physical Education. Two Cooperative Education credits are earned based on instruction/training/employment at a Canadian Armed Forces Base in one or more military trades. Applicants must be 16 years of age and have earned at least 15 credits towards their Ontario Secondary School Diploma. Students must also hold Canadian citizenship and be physically fit for acceptance into the program. Two additional Cooperative Education credits (for a total of 6 credits with this program) can also be earned for students who choose and are selected to participate in the summer training during the month of July. Check with your school's Guidance Department for program start dates.

**For more information and an on-line application form go to:**

**<http://www.dsbni.org/CoopEdu/Militia>**

### SPECIAL EDUCATION

#### SPECIAL EDUCATION ADVISORY COMMITTEE (SEAC)

The Special Education Advisory Committee is an advisory committee required under Regulation 464, under the Education Act. This committee advises the Board on issues related to Special Education and the Board's Special Education programs and services. Members include representatives of local parent associations, community representatives, and trustees of the Board. Board staff act as a resource to the Committee.

#### SPECIAL EDUCATION - PROGRAMS AND SERVICES

The District School Board of Niagara believes that all students can learn. The school system and its educational programs are organized to ensure optimal academic, affective and social growth for all students. Schools hold regular In-School Student Success Team meetings to monitor progress and plan for exceptional and at-risk students. Some students because of behavioural, communicational, intellectual or physical needs may be identified as "exceptional" and are, therefore, provided with Special Education programs and/or services.

The Special Education programs and services of the Board are described in the board's *Special Education Plan*.

The District School Board of Niagara has established Identification, Placement and Review Committees (IPRC). These committees have three purposes:

- to identify whether or not a student is exceptional, based on needs;
- to recommend an appropriate educational placement in which the student, with parental permission, will receive services;
- to review the educational progress of each exceptional student to ensure that the placement is appropriate.

All students identified as exceptional have an Individual Education Plan (IEP).

The District School Board of Niagara provides the following range of special education placements and services:

- fully self-contained;
- partially integrated;

- withdrawal assistance;
- resource assistance;
- indirect service;
- alternative placements:
  - Community and Alternative Education;
  - Home Instruction;
  - Referred to programs outside the District School Board of Niagara.
- Exceptional students in secondary school (except gifted) have a transition plan in place through the IEP Process.
- A "Parents' Guide to Special Education" outlining all Special Education program services within the Board is available through any school.

#### ACCOMMODATIONS/MODIFICATIONS

Accommodations are made in response to identified student needs and are put in place to compensate for individual learning needs. Common accommodations include preferential seating options and extra time for test taking or doing assignments. When a student is being accommodated, it is expected that the regular curricular expectations for the course are being addressed.

In certain cases, some modification to the course content may be required. The degree of modification will be considered by the Principal in the granting of a credit. Modifications are outlined on a student's IEP.

#### COMMUNITY EDUCATION SERVICES

191 Carlton Street  
St. Catharines, Ontario L2R 7P4  
Tel: 905-687-7000 • Fax: 905-688-7753

#### Community Education Services

- Adult Daytime Credit Programs
- Adult Basic Literacy Programs

#### Alternative Programs

- Success Program
- College Link
- Young Mom's Outreach Program
- Niagara Link

#### Continuing Education

- eLearning
- Night School
- Summer School
- Self Study Credit Program

- I.L.C. (Independent Learning Centre)
- GED (General Educational Development Testing)
- Interest Courses

## ADULT DAYTIME CREDIT PROGRAMS

### ◆ Lifetime Learning Program

Program emphasis is on transition to employment programs for adults.

Program offerings include high-tech computer training as well as traditional academic upgrading. Sites in St. Catharines and Port Colborne provide career opportunities in the health-care field for the Personal Support Worker certification.

Full or part-time programs are offered in adult classes and enable students:

- to earn credits towards a diploma;
- to upgrade academic qualifications;
- to develop employability skills in order to re-enter the workforce;
- to obtain prerequisites for postsecondary programs.

### Lifetime Learning Program locations are as follows:

#### Centennial Campus

240 Thorold Rd. W., Welland - 905-735-0700

#### Fort Erie Campus

7 Tait Ave., Fort Erie - 905-871-4610

#### Grimsby Campus

5 Bolton Ave., Grimsby - 905-945-5416

#### Lifetime Learning Centre Campus

535 Lake Street, St. Catharines - 905-646-3737

#### Port Colborne Campus

211 Elgin Street, Port Colborne - 905-835-1186

#### Westlane Campus

5960 Pitton Road, Niagara Falls - 905-356-2401

## ALTERNATIVE PROGRAMS

### ◆ College Link Program

This program is an alternative to high school while getting a guaranteed College placement later. It applies to students from the ages of 17 to 20 who are eligible to earn credits toward their school diploma. This 'link to your future' program is on-site at Niagara College in Welland. Referrals should come from the Guidance department and Principals.

### ◆ Young Mom's Outreach Program

This program in partnership with Adolescent Family Support Services of Niagara (A.F.S.S.N.), provides opportunities for young mothers to continue their academic education while their children are provided with appropriate child-care. Programs are currently available in Niagara Falls, St. Catharines and Welland. Further information is available through Community Education Services at (905) 687-7000.

### ◆ Adult Basic Literacy

Basic literacy and numeracy classes are available to individuals who are learning disabled, deaf, or developmentally delayed. Classes are held at various locations throughout Niagara. Assistance with costs associated with the program is available for eligible applicants. For further information contact 905-687-7000.

### ◆ Niagara Link

A program for students aged 18-21 who needed 8 or fewer credits to graduate high school. Designed for youth who are not currently attending high school or who are at risk of leaving school before graduating. This program is in partnership with Niagara College and is delivered at the College's Glendale campus. Students earn 4 high school credits and 1 Niagara College General Education course. For more information contact 905-646-3737.

## Introduction

### CONTINUING EDUCATION PROGRAMS

#### ◆ eLearning (Continuing Education model)

These are available for adults and part-time students (with their Principal's approval). These courses are delivered over the internet. For more information contact 905-687-7000 ext.54177.

#### ◆ Night School

Credit and interest courses are offered at many secondary school locations. Registration information and specific dates will be published in August and January in the Lifetime Learning Guide. Day school students wishing to enrol in a night school course must have approval from the day school Principal. Fees are charged for interest courses. For information call 905-687-7000.

#### ◆ Summer School

A wide range of credit and remedial courses are offered if there are sufficient applicants. Students must be recommended by their Principal. Application forms are available at each secondary school. A program in Language and Mathematics has been prepared for Grade 7 and 8 students who are likely to experience difficulty in achieving the curricular expectations of Grade 8 or 9. Students must be recommended for summer school by their elementary school Principal. Cooperative Education programs are also available in a wide variety of work placements. For information, contact 905-687-7000.

#### ◆ Self-Study Credit Program

These are available for adults and part-time students (with their Principal's approval and must be 18 or older). Applicants require a current transcript and a \$100 cash deposit for materials. This program allows students to earn high school credits while studying independently. Staff is available at Stamford Collegiate on Wednesday evenings from 6:30 - 8:30 p.m. and at the Fort Erie Secondary School on Wednesday evenings from 6:00 - 8:00 p.m. For further information please call 905-687-7000 ext. 54177.

#### ◆ I.L.C. (Independent Learning Centre)

For correspondence courses, individuals may contact this office in Toronto at: Tel: 1-800-387-5512 or at the website [www.ilc.org](http://www.ilc.org)

#### ◆ GED (General Educational Development Testing)

Individuals may contact the Independent Learning Centre if they are 19 years of age or older, at least one year out of school, did not graduate and are a resident of Ontario. The GED testing is considered by some employers to be equivalent to a high school diploma. Successful GED candidates earn the Ontario High School Equivalency Certificate. Five tests are written over a two day period at dates and locations set by the Independent Learning Centre.

Tel: 1-800-573-7022 • Fax: 1-416-484-2750

or

E-mail: [ged@tvo.org](mailto:ged@tvo.org)

Web site: [www.ilc.org](http://www.ilc.org)

\* click on Welcome, then

\* click on GED Testing

#### ◆ Interest Courses

Special interest courses and Saturday workshops are made available in our schools throughout the year at modest costs. The Lifetime Learning brochure is published in January and August. Phone information is available at 905-687-7000.

## COURSE SELECTION INFORMATION

### INTRODUCTION

The following information applies to all courses offered in the secondary schools of the District School Board of Niagara:

- students under the age of eighteen (18) require parental approval for all decisions on course choices. Students who are eighteen years of age or older **MAY** accept responsibility for their own course choices;
- all courses offered in District Board schools, except for some Health and Physical Education courses, are open to both male and female students;
- courses of study for each course offered in a school are maintained in the Principal's office and are available for examination by parents/guardians upon request;
- the courses offered by the secondary schools of the District School Board of Niagara have been developed according to the requirements of the Ontario Ministry of Education;
- a clear description of learning expectations is provided to students prior to instruction in each unit of study.

## SEMESTERED ORGANIZATION

The school year in the District Board's Secondary Schools is organized into semesters for most courses. In this organization, students study half their subjects in the first semester (September to January) and the other half in the second semester (February to June).

## COURSE TRANSFER INFORMATION

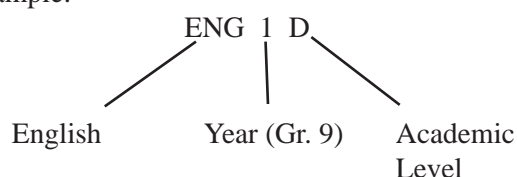
Students should select courses appropriate to their abilities and career plans. If students are having difficulties, they may discuss a change of course with their guidance counsellor. A change may be approved after consultation with parents/guardians if the following conditions are met:

- there is room in the class to which the student has requested a transfer;
- not more than half the time scheduled for the course has passed for level to level transfers in the same course;
- the course requested is appropriate for the student's educational and career plans.

## THE COURSE CODING SYSTEM

Courses are identified by 3 letters followed by a number and a letter.

For example:



The first three characteristics indicate the subject course code as prescribed by the Ministry of Education Common Course Codes.

The fourth character in the code indicates the level of the course:

- |   |   |          |
|---|---|----------|
| 1 | = | Grade 9  |
| 2 | = | Grade 10 |
| 3 | = | Grade 11 |
| 4 | = | Grade 12 |

For International Languages A,B, C, D, is used to represent the level. For ESL (English As A Second Language) A,B,C,D,E is used.

The fifth character indicates the nature of the course type or level of difficulty:

- |   |   |          |
|---|---|----------|
| D | = | Academic |
| P | = | Applied  |
| O | = | Open     |

- |   |   |                                   |
|---|---|-----------------------------------|
| C | = | College Destination               |
| M | = | College or University Destination |
| U | = | University Destination            |
| E | = | Workplace Destination             |

A sixth character is sometimes added for school use.

## THE DEFINITION OF A CREDIT

A credit is granted in recognition of the successful completion of a course that has been scheduled for a minimum of 110 hours. It is possible that ½ credit courses will be available in selected areas of the curriculum to allow students to explore a wider variety of programs.

## CHOOSING COURSES FOR GRADES 9 AND 10

Students in Grades 8 and 9 will choose courses from one or more of three types: academic, applied, and open. They will make their choices primarily on the basis of their interests, needs, and achievement. Course types chosen in Grade 9 **DO NOT LIMIT** courses that may be chosen in Grade 10. (See Cross-Over Materials)

The following is a brief description of the types of courses that are available in the different subjects.

### ■ ACADEMIC COURSES

These courses will focus on essential concepts and include additional related materials and greater emphasis will be placed on theory and abstract thinking than on practical applications. Students in Grade 9 who successfully complete these courses may choose either the academic or the applied course in the same subject in Grade 10. Students in Grade 10 will choose courses in Grade 11 depending on their planned destination. (See Cross-over Materials on this page and Prerequisite Charts at the end of this document)



## Introduction

### ■ APPLIED COURSES

These courses will focus on essential concepts, but greater emphasis will be placed on practical hands-on applications of the concepts. Students in Grade 9 who successfully complete these courses may choose either the applied or the academic course in the same subject in Grade 10. To change from Grade 9 Applied Mathematics to Grade 10 Academic Mathematics students must take a transfer course. Students in Grade 10 will choose courses in Grade 11 depending on their planned destination. (See Crossover Materials on this page and Prerequisite Charts at the end of this document)

### ■ OPEN COURSES

In disciplines such as the Arts, Health and Physical Education, Business Studies and Guidance and Career Education, all students will take the same type of course, called an Open Course. These are appropriate for all students and are designed to prepare students for further study in certain subjects and to enrich their education generally.

**The following additional course types are designed for specific purposes.**

### ■ LOCALLY DEVELOPED COMPULSORY COURSES

Students may be placed in these courses specially designed for students who have been working on expectations that are well below the course grade level. These are available only in English, Mathematics and Science, and in selected schools within the Board. More information is available through each school's Special Education or Guidance department.

### ■ CROSS-OVER MATERIALS

These materials consist of learning activities for Grade 9 students in Science or French as a Second Language who are changing course types from Grade 9 to Grade 10. The Principal may recommend that students complete these courses in order to be better prepared to make a change in course type.

These materials can be found on the Internet at

**www.ilc.org**

\* click on Welcome

\* enter search phrase **crossover**

Alternatively, a CD is available for loan from each secondary school. More information is available at each secondary school.

### ■ TRANSFER COURSES

There is one transfer course that will provide students who have successfully completed Foundations of Mathematics, Grade 9, Applied (MFM 1P) with an opportunity to achieve the expectations not covered in that course but included in Principles of Mathematics, Grade 9, Academic. On successful completion of this transfer course, students may proceed to Principles of Mathematics, Grade 10, Academic (MPM 2D) or students will earn a .5 credit upon completion of this course.

### ■ COURSES BEYOND GRADE 10

In Grades 11 and 12, courses offered to prepare students for their post-secondary destinations include: *university preparation courses*, developed in close collaboration with universities; *university/college preparation courses*, developed in close collaboration with both universities and colleges; *college preparation courses*, developed in close collaboration with colleges; and *workplace preparation courses*, developed in close collaboration with representatives from a variety of workplaces. *Open courses* are also offered in Grades 11 and 12.

#### ◆ University Preparation Courses

University preparation courses are designed to equip students with the knowledge and skills they need to meet the entrance requirements for university programs. The range of courses offered and the content of these courses will allow students to prepare for university programs and related careers.

## ◆ University/College Preparation Courses

University/college preparation courses include content that is relevant for both university and college programs. These courses are designed to equip students with the knowledge and skills they need to meet the entrance requirements for specific university and college programs.

## ◆ College Preparation Courses

College preparation courses are designed to equip students with the knowledge and skills they need to meet the entrance requirements for college programs. The range of courses offered and the content of these courses will allow students to prepare for most college programs and related careers.

## ◆ Workplace Preparation Courses

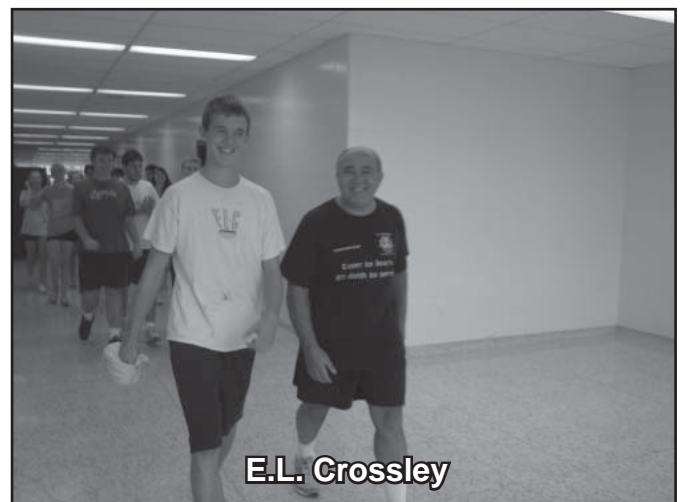
Workplace preparation courses are designed to equip students with the knowledge and skills they need for direct entry into the workplace or for admission to apprenticeship programs and other training programs offered in the community. The range and content of the courses offered will allow students to prepare for a variety of jobs, training programs, and careers.

## ◆ Open Courses

In disciplines such as the Arts, Health and Physical Education, Business Studies and Guidance and Career Education, all students will take the same type of course, called an Open Course. These are appropriate for all students and are designed to prepare students for further study in certain subjects and to enrich their education generally.

## ■ MAGNET CONCEPT

In order to offer a broader range of courses, some of which require specialized equipment and facilities, some schools will co-ordinate their timetables to enable students to access “magnet courses”. Students can travel to a nearby school for part of their program, usually a half-day, while still remaining a student at their home school. Magnet courses include offerings such as Hospitality Services, Culinary Arts, Auto Body, Horticulture, Hairstyling and Aesthetics, Health Care and Welding. This concept allows students to specialize in an area of interest to them. For more information contact your local school’s Guidance Department.



# **Course Descriptions**

The page features a light gray background with a black border. In the upper portion, the words "Course" and "Descriptions" are stacked vertically in a large, bold, black serif font. From the bottom-left corner, three thin, parallel diagonal lines extend towards the top-right corner, crossing the text area.

## ARTS

### DRAMA

**ADA 10**                      **Drama - Open**                      **1 credit**

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

### INTEGRATED ARTS

**ALC 10**                      **Integrated Arts - Open**                      **1 credit**

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

### MUSIC

**AMU 10**                      **Music - Open**                      **1 credit**

This course emphasizes the creation and performance of music at a level consistent with previous experience and is aimed at developing technique, sensitivity, and imagination. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of reflective and analytical activities. Students will develop an understanding of the conventions and elements of music and of safe practices related to music, and will develop a variety of skills transferable to other areas of their life.

#### Music Focus Courses:

- AMI 10 - Instrumental Music - Band
- AMM 10 - Music and Computers
- AMR 10 - Repertoire
- AMS 10 - Instrumental Music - Strings
- AMV 10 - Music - Vocal/Choral

## ARTS

### DANCE

**ATC 10**                      **Dance - Open**                      **1 credit**

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

### VISUAL ARTS

**AVI 10**                      **Visual Arts - Open**                      **1 credit**

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.



Eden

### BUSINESS STUDIES

#### **BBI 10 Introduction to Business - Open 1 credit**

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

#### **BTT 10 Information and Communication Technology in Business - Open 1 credit**

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.

### CANADIAN AND WORLD STUDIES

#### **CGC 1D Geography of Canada - Academic 1 credit**

This course explores Canada's distinct and changing character and the geographic systems and relationships that shape it. Students will investigate the interactions of natural and human systems within Canada, as well as Canada's economic, cultural, and environmental connections to other countries. Students will use a variety of geotechnologies and inquiry and communication methods to analyse and evaluate geographic issues and present their findings.

This course may be offered in French as part of the Extended French program. See page 15 for more details.

### CANADIAN AND WORLD STUDIES

#### **CGC 1P Geography of Canada - Applied 1 credit**

This course focuses on geographic issues that affect Canadians today. Students will draw on personal and everyday experiences to learn about Canada's distinct and changing character and the natural and human systems and global influences that shape the country. Students will use a variety of geotechnologies and inquiry and communication methods to examine practical geographic questions and communicate their findings.

### ENGLISH

#### **ENG 1L English Locally Developed Compulsory Course 1 credit**

This course emphasizes the key reading, writing, oral communication and thinking skills students need for success in secondary school and in their daily lives. In particular, the program works toward preparing students to enter the Grade 11 course in English-Workplace Preparation and to complete the literacy test successfully. Students read a variety of narrative and expository forms, poetry, and drama and practise the skills necessary for clear and accurate spoken and written language. In particular, course activities will help develop confidence and self-esteem and provide motivation to succeed in school and life.

#### **ENG 1D English - Academic 1 credit**

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 analyse 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.

### ENGLISH

**ENG 1P**                      **English - Applied**                      **1 credit**

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

**For English as a Second Language  
Course Descriptions, please see page 66.**

### FRENCH

**FEF 1D**                      **Extended French - Academic**                      **1 credit**

This course emphasizes the expansion of students' oral communication, reading, and writing skills through the study of themes that reflect their interests. Students will apply their knowledge of French in discussions, debates, dramatizations, and oral presentations. Students will read and write in a variety of genres (e.g., poems, articles, brochures) and study at least one short novel intended for a French-speaking audience.

For more information regarding the Extended French program see page 15.

**FSF 1D**                      **Core French - Academic**                      **1 credit**

This course emphasizes the further development of oral communication, reading, and writing skills. Students will build on and apply their knowledge of French while exploring a variety of themes, such as relationships, trends, and careers. Thematic readings, which include a selection of short stories, articles, and poems, will serve as stepping stones to oral and written activities.

### FRENCH

**FSF 1P**                      **Core French - Applied**                      **1 credit**

This course emphasizes the further development of oral communications skills, using the theme of media. The development of oral communication skills will be integrated with the development of reading and writing skills. Students will expand their ability to understand and speak French through conversations, discussions, and presentations. They will also read media-related short stories, articles, poems, and songs and write brief descriptions, letters, dialogues, and invitations.

### GUIDANCE AND CAREER EDUCATION

**GLS 10/  
GLE 10\***                      **Learning Strategies 1:  
Skills for Success in  
Secondary School - Open**                      **1 credit**

This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace, and the community. The course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond.

\* This version of the Learning Strategies course (GLE 10) is only available to students who have an IEP, with Principal recommendation only.



## HEALTH AND PHYSICAL EDUCATION

**PPL 10**                      **Healthy Active**                      **1 credit**  
**Living Education - Open**

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

### Area of Focus:

The learning expectations of Healthy Active Living Education (PPL 10) course outline the knowledge, skills and health areas that students are expected to demonstrate by the end of each course. Schools may offer focus-courses options for a particular group of physical activities as the vehicle through which students will attain the expectations. Possible focus options are listed below. **Students may select any number of Focus Options at the same grade level each year.**

**PAF 10**                      **Personal and Fitness Activities**                      **1 credit**

This course emphasizes regular participation in a variety of enjoyable fitness activities that promote life-long healthy active living. Student learning will include the application of movement principles to refine their skills, participation in a variety of fitness activities (e.g. aerobics, weight training, jazzercise, self-defense etc) that enhance personal competence and health, and examination of issues related to healthy living. Reference should be made to the Healthy Active Living Education open course description for Grade 9 health curriculum expectations.

**PAL 10**                      **Large Group Activities**                      **1 credit**

This course emphasizes regular participation in a variety of enjoyable large group activities that promote life-long healthy active living. Student learning will include the application of movement principles to refine their skills, participation in a variety of large group/team sport activities (e.g. soccer, field-lacrosse, rugby, ultimate Frisbee) that enhance personal competence, fitness and health and the examination of issues related to healthy living. Reference should be made to the course description for Grade 9 for health areas of study.

## MATHEMATICS

**MAT 1L**                      **Mathematics**                      **1 credit**  
**Locally Developed Compulsory Course**

This course provides students who have experienced significant difficulties in previous Mathematics courses an opportunity to obtain sufficient background and skill development to prepare them for Grade 11 and 12 Workplace Preparation courses. Whenever possible, ideas will be presented in a real-life context, providing students with the opportunity to explore, organize, interpret, and use mathematical models to solve problems. Technology and manipulative materials will be used wherever appropriate. Assessment and evaluation will be done using a wide variety of strategies.

**MFM 1P**                      **Foundations of Mathematics -**                      **1 credit**  
**Applied**

This course enables students to develop 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 relationships, 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.

Successful completion of this course prepares students for Foundations of Mathematics, Grade 10, Applied (MFM2P). (*Note:* Students who wish to take Principles of Mathematics, Grade 10, Academic [MPM2D] after completing this course will need to take a transfer course.) Learning through hands-on activities and the use of concrete examples is an important aspect of this course.



## MATHEMATICS

**MPM 1D Principles of Mathematics - Academic 1 credit**

This course enables students to develop 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 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 multistep problems.

Successful completion of this course prepares students for Principles of Mathematics, Grade 10, Academic (MPM2D) or Foundations of Mathematics, Grade 10, Applied (MFM2P). Learning through abstract reasoning is an important aspect of this course.

## NATIVE STUDIES

**NAC 10 Expressing Aboriginal Cultures - Open 1 credit**

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



## SCIENCE

**SNC 1L Science 1 credit**  
**Locally Developed Compulsory Course**

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

**SNC 1D Science - Academic 1 credit**

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.

This course may be offered in French as part of the Extended French program. See page 15 for more details.

**SNC 1P Science - Applied 1 credit**

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.



### SOCIAL SCIENCE AND THE HUMANITIES

#### HIF 10 Individual and Family Living - Open 1 credit

This course explores the challenges faced by all people: how to meet basic needs, how to relate to others, how to manage resources, and how to become responsible members of society. Students will acquire knowledge and skills that are needed to make the transition to adulthood. Teachers will instruct students in developing interpersonal, decision-making, and practical skills related to daily life. Students will explore the functioning of families and the diversities found among families and within society.

#### HFN 10 Food and Nutrition - Open 1 credit

This course explores the factors that affect attitudes and decisions about food, examines current issues of body image and food marketing, and is grounded in the scientific study of nutrition. Students will learn how to make informed food choices and how to prepare foods, and will investigate our Canadian food heritage and food industries, as well as global food issues. The course also introduces students to research skills related to food and nutrition.

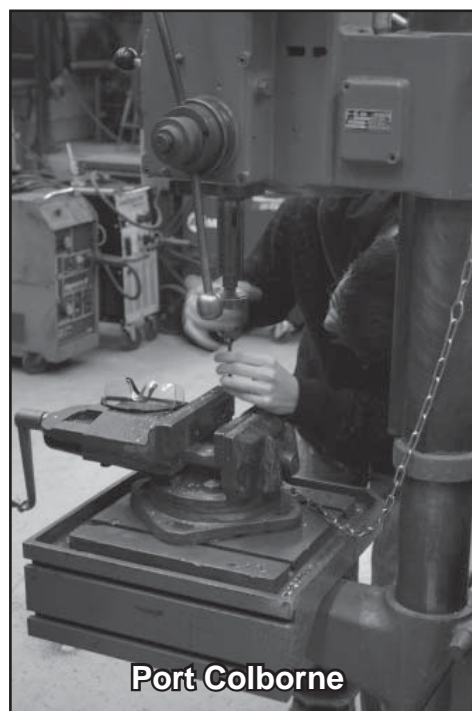
### TECHNOLOGICAL EDUCATION

#### TIJ 10 Exploring Technologies - Open 1 credit

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.

Emphasis Course:

- TGJ10 - Exploring Communications Technology
- TEJ10 - Exploring Computer Technology
- TCJ10 - Exploring Construction Technology
- THJ10 - Exploring Green Industries
- TXJ10 - Exploring Hairstyling and Aesthetics
- TPJ10 - Exploring Health Care
- TFJ10 - Exploring Hospitality and Tourism
- TMJ10 - Exploring Manufacturing Technology
- TDJ10 - Exploring Technological Design
- TTJ10 - Exploring Transportation Technology



## ARTS

### DRAMA

**ADA 20**                      **Drama - Open**                      **1 credit**

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.

**Drama Focus Course:**

ADD 20 - Drama - Production

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### INTEGRATED ARTS

**ALC 20**                      **Integrated Arts - Open**                      **1 credit**

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

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### MUSIC

**AMU 20**                      **Music - Open**                      **1 credit**

This course emphasizes the creation and performance of music at a level consistent with previous experience. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of reflective and analytical activities. Students will develop their understanding of musical conventions, practices, and terminology and apply the elements of music in a range of activities. They will also explore the function of music in society with reference to the self, communities, and cultures.

**Music Focus Courses:**

- AMG 20 - Guitar Music
- AMH 20 - Stage - Band Music
- AMI 20 - Instrumental Music - Band
- AMK 20 - Keyboard Music
- AMM 20 - Music and Computers
- AMQ 20 - Steel Drum - Music
- AMR 20 - Repertoire
- AMS 20 - Instrumental Music - Strings
- AMT 20 - Music Theatre
- AMV 20 - Music - Vocal/Choral

## ARTS

### MEDIA ARTS

**ASM 20**                      **Media Arts - Open**                      **1 credit**

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.

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### DANCE

**ATC 20**                      **Dance - Open**                      **1 credit**

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

**Dance Focus Course:**

ATD 20 - Dance - Composition

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### VISUAL ARTS

**AVI 20**                      **Visual Arts - Open**                      **1 credit**

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.

**Visual Arts Focus Courses:**

- AWM 20 - Visual Arts - Drawing and Painting
- AWR 20 - Visual Arts - Film/Video

### BUSINESS STUDIES

#### **BBI 20 Introduction to Business - Open 1 credit**

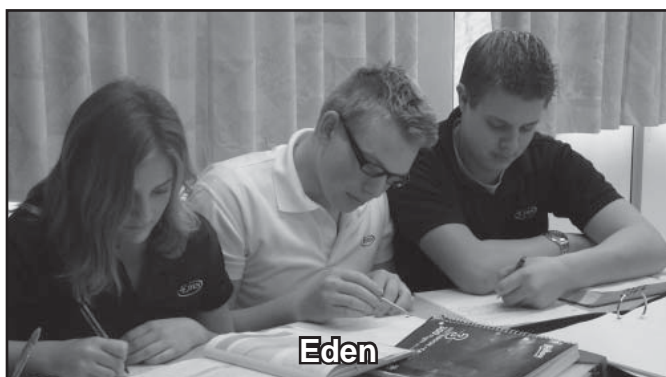
This course introduces students to the world of business. Students will develop an understanding of the functions of business, including accounting, marketing, information technology, human resources, and production, and of the importance of ethics and social responsibility. This course builds a foundation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

\* This course is not available to students who have completed BBI 10.

#### **BTT 20 Information and Communication Technology in Business - Open 1 credit**

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.

\* This course is not available to students who have completed BTT 10.



### CANADIAN AND WORLD STUDIES

#### **CHC 2D Canadian History Since World War I - Academic 1 credit**

This course explores the local, national, and global forces that have shaped Canada's national identity from World War I to the present. Students will investigate the challenges presented by economic, social, and technological changes and explore the contributions of individuals and groups to Canadian culture and society during this period. Students will use critical-thinking and communication skills to evaluate various interpretations of the issues and events of the period and to present their own points of view.

#### **CHC 2P Canadian History Since World War I - Applied 1 credit**

This course explores some of the pivotal events and experiences that have influenced the development of Canada's identity as a nation, from World War I to the present. By examining how the country has responded to economic, social, and technological changes and how individuals and groups have contributed to Canadian culture and society during this period, students will develop their ability to make connections between historical and current events. Students will have opportunities to formulate questions, locate information, develop informed opinions, and present ideas about the central issues and events of the period.

#### **CHV 2O Civics - Open .5 credit**

This course explores what it means to be an informed, participating citizen in a democratic society. Students will learn about the elements of democracy in local, national, and global contexts, about political reactions to social change, and about political decision-making processes in Canada. They will explore their own and others' ideas about civics questions and learn how to think critically about public issues and react responsibly to them.

This course may be offered in French as part of the Extended French program. See page 15 for more details.

This course may be available "on-line" as an eLearning course. See your Guidance Counsellor.

## CLASSICAL AND INTERNATIONAL LANGUAGES

Classical (only at Sir Winston Churchill S.S.)

**LVL AD Latin 1 credit**

This course introduces students to the achievements of the classical world through the study of Latin or ancient Greek. Students will learn vocabulary and grammar essential for reading and translating classical texts. English is the language of instruction. Through a variety of enrichment activities, such as presentations, debates, and dialogues, students will explore such aspects of life in the ancient world as trade, commerce, education, entertainment, and social customs while improving their language skills.

### International

<b>LWG BD</b>	<b>German - Academic</b>	<b>1 credit</b>
<b>LWI BD/LWI BO</b>	<b>Italian - Academic</b>	<b>1 credit</b>
<b>LKJ BD</b>	<b>Japanese - Academic</b>	<b>1 credit</b>
<b>LWS BD</b>	<b>Spanish - Academic</b>	<b>1 credit</b>
<b>LYA AO</b>	<b>Arabic - Academic</b>	<b>1 credit</b>

These courses are designed to enable students to begin to communicate with native speakers of the language of study. Students will use simple language and read age and language-appropriate passages for various purposes. They will explore aspects of the culture of countries where the language under study is spoken, including social customs and the arts, by participating in cultural events and activities involving both print and technological resources.

## COMPUTER STUDIES

**ICS 20 Introduction to Computer Studies 1 credit**  
**Open**

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

## ENGLISH

**ENG 2L English 1 credit**  
**Locally Developed Compulsory Course**

This course emphasizes key skills in reading, writing, oral communication, and thinking that these students need for continuing success in their secondary school subjects, and to communicate with others in their lives outside of school. The units suggest instructional strategies and a developmental approach to teaching the expectations that are essential for these students' success. This course gives students a solid literacy skills foundation to enter Grade 11 English, Workplace and to prepare them for successful completion of the Grade 10 Test of Reading and Writing Skills. Students read key information and literacy text forms, including novels, editorials, magazine feature articles and poetry, for personal and academic purposes. They use their knowledge of media to create media works. Students will produce clear, complete writing in a variety of narrative and non-narrative forms for real-life purposes (including world of work), using appropriate and correct language. In particular, the course encourages students to develop and reflect upon the strategies that will improve their literacy competence and confidence.

*Prerequisite: A Grade 9 English Credit*

**ENG 2D English - Academic 1 credit**

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 analyse literary texts from contemporary and historical periods, interpret and evaluate informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on the selective use of strategies that contribute to effective communication. This course is intended to prepare students for the compulsory Grade 11 university or college preparation course.

*Prerequisite: English, Grade 9, Academic or Applied*

**ENG 2P English - Applied 1 credit**

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

*Prerequisite: English, Grade 9, Academic or Applied*

### ENGLISH (OPTIONAL CREDITS)

**ELS 20                      Literacy Skills - Open                      1 credit**

This course is designed to help students strengthen essential reading and writing skills, providing them with the extra literacy support they need in order to graduate. Students will read informational, graphic, and literary texts, with a focus on locating information, identifying main ideas and supporting details, building vocabulary, and consolidating skills in the application of key comprehension strategies. The course will also help students develop core learning strategies.

**For English as a Second Language  
Course Descriptions, please see page 66.**

### FRENCH

**FEF 2D                      Extended French - Academic                      1 credit**

This course emphasizes the continued development and refinement of students' oral communication, reading, and writing skills as they explore a variety of themes. Students will expand their knowledge and appreciation of francophone culture through the study and interpretation of novels, poems, and plays intended for a French-speaking audience.

*Prerequisite: Grade 9 Extended French,  
Academic or Applied*

For more information regarding the Extended French program see page 15.

**FSF 2D                      Core French - Academic                      1 credit**

This course enables students to increase their knowledge of the French language, further develop their language skills, and deepen their understanding and appreciation of francophone culture around the world. Exploring a variety of themes, students will develop and apply critical thinking skills in discussion, in their analysis and interpretation of texts, and in their own writing.

*Prerequisite: Grade 9 Core French, Academic or Applied*

**FSF 2P                      Core French - Applied                      1 credit**

This course emphasizes the further development of oral communication, reading, and writing skills using a broad-based theme such as adolescence. Students will expand their knowledge of French by studying a series of theme-related topics, such as students' rights and responsibilities, relationships with peers and adults, and part-time jobs.

### GUIDANCE AND CAREER EDUCATION

**GLC 20                      Career Studies - Open                      .5 credit**

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

This course may be offered in French as part of the Extended French program. See page 15 for more details.

This course may be available "on-line" as an eLearning course. See your Guidance Counsellor.

**GLE 20                      Learning Strategies\*                      1 credit**

This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace, and the community. The course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond.

\* This course is only available to students who have an IEP, with Principal recommendation only.

**GLD 20                      Discovering the Workplace  
Open                      1 credit**

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

### HEALTH AND PHYSICAL EDUCATION

**PPL 2O**                      **Healthy Active Living**                      **1 credit**  
**Education - Open**

This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Student learning will include the application of movement principles to refine skills; participation in a variety of activities that enhance personal competence, fitness, and health; examination of issues related to healthy sexuality, healthy eating, substance use and abuse; and the use of informed decision-making, conflict resolution, and social skills in making personal choices.

**Area of Focus:**

The learning expectations of Healthy Active Living Education (PPL 2O) course outline the knowledge, skills and health areas that students are expected to demonstrate by the end of each course. Schools may offer focus-courses options for a particular group of physical activities as the vehicle through which students will attain the expectations. Possible focus options are listed below. **Students may select any number of Focus Options at the same grade level each year.**

**PAF 2O**                      **Personal and Fitness Activities**                      **1 credit**

This course emphasizes regular participation in a variety of enjoyable fitness activities that promote life-long healthy active living. Student learning will include the application of movement principles to refine their skills, participation in a variety of fitness activities (e.g. aerobics, fitness training, self-defense etc) that enhance personal competence and health, and examination of issues related to healthy living. Reference should be made to the Healthy Active Living Education open course description for Grade 10 health curriculum expectations.

**PAL 2O**                      **Large Group Activity**                      **1 credit**

This course emphasizes regular participation in a variety of enjoyable large group activities that promote life-long healthy active living. Student learning will include the application of movement principles to refine their skills, participation in a variety of large group/team sport activities (e.g. soccer, field-lacrosse, rugby, ultimate Frisbee) that enhance personal competence, fitness and health and the examination of issues related to healthy living. Reference should be made to the course description for Grade 10 for health areas of study.

### MATHEMATICS

**MAT 2L**                      **Mathematics**                      **1 credit**  
**Locally Developed Compulsory Course**

This course provides students who have experienced significant difficulties in previous Mathematics courses an opportunity to obtain sufficient background and skill development to prepare them for Grade 11 and 12 Workplace Preparation courses. Whenever possible, ideas will be presented in a real-life context, providing students with the opportunity to explore, organize, interpret, and use mathematical models to solve problems. Technology and manipulative materials will be used wherever appropriate. Assessment and evaluation will be done using a wide variety of strategies.

*Prerequisite: A Grade 9 Mathematics credit*

**MFM 2P**                      **Foundations of Mathematics -**                      **1 credit**  
**Applied**

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

*Prerequisite: Grade 9 Mathematics, Academic or Applied*

**MPM 2D**                      **Principles of Mathematics -**                      **1 credit**  
**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 relationships and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute-angled triangles. Students will reason mathematically as they solve multistep problems and communicate their thinking.

*Prerequisite: Grade 9 Mathematics, Academic*

This course may be offered in French as part of the Extended French program. See page 15 for more details.

### NATIVE STUDIES

**NAC 20**      **Aboriginal People in Canada**      **1 credit**  
**- Open**

This course emphasizes historical and contemporary issues that affect the relationship between Aboriginal peoples and Canadian governments. Students will examine legal, political, social, and economic issues; key aspects of the Indian Act and its revisions that have an impact on the daily lives of Aboriginal persons; the different types of relationships that Aboriginal peoples have established with other nations throughout history; and the methodology of historical inquiry.

### SCIENCE

**SNC 2L**      **Science**      **1 credit**  
**Locally Developed Compulsory Course**

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

*Prerequisite: A Grade 9 Science Credit*

**SNC 2D**      **Science - Academic**      **1 credit**

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

*Prerequisite: Grade 9 Science, Academic or Applied*

This course may be offered in French as part of the Extended French program. See page 15 for more details.

### SOCIAL SCIENCE AND THE HUMANITIES

**SNC 2P**      **Science - Applied**      **1 credit**

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

*Prerequisite: Grade 9 Science, Academic or Applied*

These courses are not available to students who have completed HFN 1O and/or HIF 1O.

**HFN 2O**      **Food and Nutrition - Open**      **1 credit**

This course explores the factors that affect attitudes and decisions about food, examines current issues of body image and food marketing, and is grounded in the scientific study of nutrition. Students will learn how to make informed food choices and how to prepare foods, and will investigate our Canadian food heritage and food industries, as well as global food issues. The course also introduces students to research skills related to food and nutrition.

**HIF 2O**      **Individual and Family Living -**      **1 credit**  
**Open**

This course explores the challenges faced by all people: how to meet basic needs, how to relate to others, how to manage resources, and how to become responsible members of society. Students will acquire knowledge and skills that are needed to make the transition to adulthood. Teachers will instruct students in developing interpersonal, decision-making, and practical skills related to daily life. Students will explore the functioning of families and the diversities found among families and within society.

### TECHNOLOGICAL EDUCATION

In broad-based technology, courses in Grades 10, 11 and 12 that lead to apprenticeship or certification programs, or that are part of school-work transition programs, may be planned for up to 330 hours of scheduled instructional time. This additional instructional time allows for the practice and refinement of skills needed to raise the quality of students' performance to the levels required for certification, entry into apprenticeship programs, or participation in school-work transition programs. (It may also support articulation agreements for advanced standing or preferred entrance into specialized programs.) Instructional time may be increased by increments of 55 hours; for each additional 55 hours, students earn an additional half-credit. **A maximum of three credits may be earned for the successful completion of a 330-hour course.** The number of additional credits and the nature of the assignments to be completed must be established before the start of the course.

### COMMUNICATIONS TECHNOLOGY

#### **TGJ 20    Communications Technology - Open    1 credit**

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

### COMPUTER TECHNOLOGY

#### **TEJ 20    Computer Technology - Open    1 credit**

This course introduces students to computer systems, networking, and interfacing, as well as electronics and robotics. Students will assemble, repair, and configure computers with various types of operating systems and application software. Students will build small electronic circuits and write computer programs to control simple peripheral devices or robots. Students will also develop an awareness of environmental and societal issues related to the use of computers, and learn about secondary and postsecondary pathways to careers in computer technology.

### TECHNOLOGICAL EDUCATION

### CONSTRUCTION TECHNOLOGY

#### **TCJ 20    Construction Technology - Open    1 credit**

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.

#### **TEX 23    Electricity - Locally Developed    1 credit Open**

This course requires students to design and construct electrical circuits related to residential and commercial electrical fields. Students will use all the related hand/power tools and metering equipment. They will be introduced to AC/DC theory and the operation of hydro-electric generating stations. They will also estimate materials and labour costs, and study hydro electric safety codes and standards. They will explore the impact of electrical technology on society and identify careers related to the electrical field.

### HAIRSTYLING AND AESTHETICS

#### **TXJ 20    Hairstyling & Aesthetics    1 credit Open**

This course presents hairstyling, make-up, and nail care techniques from a salon/spa perspective. Through a variety of school and community-based activities, students learn fundamental skills in hairstyling, giving manicures and facials and providing hair/scalp analyses, and treatments. Students also consider related environmental and societal issues and explore secondary and postsecondary pathways leading to careers in the field of hairstyling and aesthetics.



## TECHNOLOGICAL EDUCATION

### HEALTH CARE

**TPJ 20 Health Care - Open 1 credit**

This course introduces students to personal health promotion, child and adolescent health concerns, and a variety of medical services, treatments, and technologies. Students will become familiar with various instruments and equipment and will learn about human anatomy, organs, and body chemistry, as well as the effects that lifestyle choices can have on personal well-being. They will plan recreational activities for youth, perform a dietary analysis, and evaluate health care practices. Students will develop an awareness of environmental and societal issues related to health care and will explore secondary and postsecondary pathways leading to careers in the field.

**THJ 20 Green Industries Open 1 credit**

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

**Locally Developed Course:**  
THX 23 - Horticulture - Open

### HOSPITALITY AND TOURISM

**TFJ 20 Hospitality and Tourism Technology - Open 1 credit**

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.

## TECHNOLOGICAL EDUCATION

### MANUFACTURING TECHNOLOGY

**TMJ 20 Manufacturing Technology - Open 1 credit**

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.

**Emphasis Course:**  
TMJ2OW - Manufacturing Technology - Welding

**TCX 23 Refrigeration - Locally Developed Open 1 credit**

This course examines the principles of natural and artificial refrigeration, heat and heat flow, temperature measurement, and pressures. Students will design and build refrigeration systems using tools and instruments unique to the refrigeration and air conditioning trade. Students will solve technological problems relating to the fabrication, servicing and the ultimate operation of these systems. The study of service valves, testing manifold, pressure readings and safety is also included. Students will acquire transferable skills relating to similar technologies.

### TECHNOLOGICAL DESIGN

**TDJ 20 Technological Design - Open 1 credit**

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

### TECHNOLOGICAL EDUCATION

#### TRANSPORTATION TECHNOLOGY

**TTJ 20 Transportation Technology - Open 1 credit**

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.

#### **Emphasis Courses:**

TTJ20A - Transportation Technology - Autobody

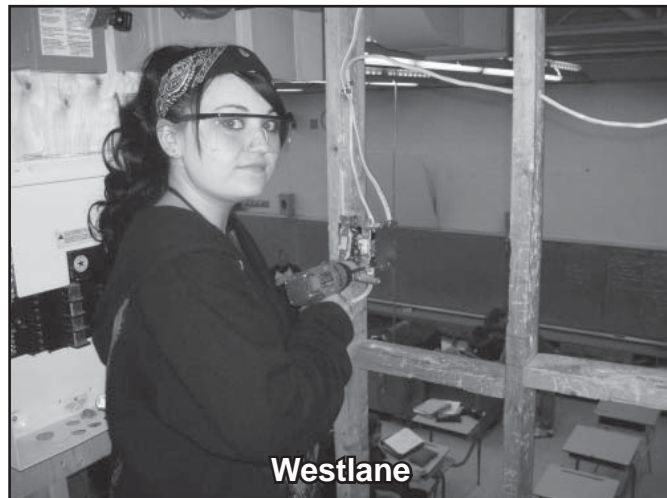
TTJ20S - Transportation Technology - Small Engine



**St. Catharines Collegiate**



**Governor Simcoe**



**Westlane**



**Sir Winston Churchill**



**A.N. Myer**

## ARTS

### DRAMA

**ADA 3M**                      **Drama -**                      **1 credit**  
**University/College Preparation**

This course requires students to create and perform in dramatic presentations. Students will analyse, interpret, and perform dramatic works from various cultures and time periods. Students will research various acting styles and conventions that could be used in their presentations, and analyse the functions of playwrights, directors, actors, designers, technicians, and audiences.

*Prerequisite: Grade 9 or 10 Drama, Open*

#### Drama Focus Courses:

- ADB 3M - Drama - Music Theatre
- ADC 3M - Drama in the Community
- ADD 3M - Drama - Production

**ADA 3O**                      **Drama - Open**                      **1 credit**

This course requires students to engage in dramatic processes and the presentation of dramatic works, and emphasizes the application of drama skills in other contexts and opportunities. Students will interpret and present works in a variety of dramatic forms, create and script original works, and critically analyse the processes involved in producing dramatic works. Students will develop a variety of skills related to collaboration and the presentation of dramatic works.

#### Drama Focus Courses:

- ADC 3O - Drama in the Community
- ADD 3O - Drama - Production



**West Park**

## ARTS

### EXPLORING AND CREATING THE ARTS

**AEA 3O**    **Exploring and Creating the Arts -**    **1 credit**  
**Open**

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

### MUSIC

**AMU 3M**                      **Music -**                      **1 credit**  
**University/College Preparation**

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

*Prerequisite: Grade 9 or 10 Music, Open*

#### Music Focus Courses:

- AMG 3M - Guitar Music
- AMH 3M - Stage - Band Music
- AMI 3M - Instrumental Music - Band
- AMK 3M - Keyboard Music
- AMM 3M - Music and Computers
- AMR 3M - Repertoire
- AMS 3M - Instrumental Music -Strings
- AMT 3M - Music Theatre
- AMV 3M - Music - Vocal/Choral

## ARTS

**AMU 30**                      **Music - Open**                      **1 credit**

This course develops students' musical literacy through performance and the preparation and presentation of music productions. Students will perform works at a level consistent with previous experience. Independently and collaboratively, students will use current technology and the creative and critical analysis processes to plan, produce, present, and market musical productions. Students will respond to, reflect on, and analyse music from various genres and periods, and they will develop skills transferable to other aspects of their life and their careers.

**Music Focus Courses:**

- AMG 30 - Guitar Music
- AMI 30 - Instrumental Music - Band
- AMK 30 - Keyboard Music
- AMM 30 - Music and Computers
- AMP 30 - Instrumental Music - Percussion
- AMQ 30 - Steel Drum - Music
- AMR 30 - Repertoire
- AMV 30 - Music - Vocal/Choral

## MEDIA ARTS

**ASM30**                      **Media Arts - Open**                      **1 credit**

This course enables students to create media art works using available and emerging technologies such as computer animation, digital imaging, 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.

**ASM3M**                      **Media Arts -**                      **1 credit**  
**University/College Preparation**

This course focuses on the development of media arts skills through the production of art works involving traditional and emerging technologies, tools, and techniques such as new media, computer animation, and web environments. Students will explore the evolution of media arts as an extension of traditional art forms, use the creative process to produce effective media art works, and critically analyse the unique characteristics of this art form. Students will examine the role of media artists in shaping audience perceptions of identity, culture, and community values.

*Prerequisite: Grade 10, Media Arts, Open or any Grade 9 or 10 course in the arts*

## ARTS

### DANCE

**ATC 3M**                      **Dance -**                      **1 credit**  
**University/College Preparation**

This course emphasizes the development of students' artistry, improvisational and compositional skills, and technical proficiency in global dance genres. Students will apply dance elements, techniques, and tools in a variety of ways, including performance situations; describe and model responsible practices related to the dance environment; and reflect on how the study of dance affects personal and artistic development.

*Prerequisite: Grade 9 or 10 Dance, Open*

**Dance Focus Courses:**

- ATD 3M - Dance - Composition
- ATP 3M - Dance - Performance Practice

**ATC 30**                      **Dance - Open**                      **1 credit**

This course emphasizes the development of students' movement vocabulary relating to global dance genres, and of their understanding of the elements of dance and the tools of composition in a variety of performance situations. Students will research and explain how physical, intellectual, and artistic skills developed in dance can be applied in a wide range of careers. They will apply technologies and techniques throughout the process of creation and presentation, and reflect on how studies in the dance arts affect personal identity.

**Dance Focus Courses:**

- ATD 30 - Dance - Composition
- ATP 30 - Dance - Performance Practice



### ARTS

#### VISUAL ARTS

**AVI 3M**                      **Visual Arts -**                      **1 credit**  
**University/College Preparation**

This course enables students to further develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, and printmaking, as well as the creation of collage, multimedia works, and works using 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 artform (e.g. photography, video, computer graphics, information design).

*Prerequisite: Grade 9 or 10 Visual Arts, Open*

#### Visual Arts focus courses:

AWD 3M - Visual Arts - Visual Design  
AWJ 3M - Visual Arts - Stage Design  
AWM 3M - Visual Arts - Drawing and Painting  
AWP 3M - Visual Arts - Sculpture  
AWQ 3M - Visual Arts - Photography

**AVI 3O**                      **Visual Arts - Open**                      **1 credit**

This course focuses on studio activities in the visual arts, such as 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.

#### Visual Arts Focus Courses:

AWA 3O - Visual Arts - Crafts  
AWC 3O - Visual Arts - Ceramics  
AWD 3O - Visual Arts - Visual Design  
AWJ 3O - Visual Arts - Stage Design  
AWM 3O - Visual Arts - Drawing and Painting  
AWP 3O - Visual Arts - Sculpture  
AWQ 3O - Visual Arts - Photography

### BUSINESS STUDIES

**BAF 3M**    **Financial Accounting Fundamentals - 1 credit**  
**University/College Preparation**

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

This course may be available “on-line” as an eLearning course. See your Guidance Counsellor.

**BAI 3E**                      **Accounting Essentials -**                      **1 credit**  
**Workplace Preparation**

This course introduces students to the accounting cycle of a service business. Students will use computer application software to record business transactions and to prepare financial statements. Students will also investigate banking and cash management, decision making, ethical behaviour, and career opportunities in the field of accounting.

**BDI 3C**    **Entrepreneurship: The Venture - 1 credit**  
**College Preparation**

This course focuses on ways in which entrepreneurs recognize opportunities, generate ideas, and organize resources to plan successful ventures that enable them to achieve their goals. Students will create a venture plan for a school-based or student-run business. Through hands-on experiences, students will have opportunities to develop the values, traits, and skills, most often associated with successful entrepreneurs.

**BDP 3O**                      **Entrepreneurship:**                      **1 credit**  
**The Enterprising Person - Open**

This course examines the importance of enterprising employees in today’s changing business environment. Students will learn about the skills and attributes of enterprising employees, the distinguishing features of their work environments, and the challenges and rewards of becoming an enterprising person. Students will also have an opportunity to demonstrate and develop enterprising skills by planning and organizing a school or community event.

### BUSINESS STUDIES

**BMI 3C      Marketing: Goods, Services,      1 credit**  
**Events - College Preparation**

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

**BMX 3E      Marketing: Retail and Service -      1 credit**  
**Workplace Preparation**

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

**BTA 3O      Information and Communication      1 credit**  
**Technology: The Digital Environment - Open**

This course prepares students for the digital environment. Using a hands-on approach, students will further develop information and communication technology skills through the use of common business software applications. The concept and operation of e-business will be explored, and students will design and create an e-business website. The skills developed in this course will prepare students for success in the workplace and/or postsecondary studies.

### Business Studies Cooperative Education Program

All business courses can be used in the Cooperative Education Program for students considering careers in a variety of fields such as accounting, human resources, marketing and advertising, law and security, tourism and travel, entrepreneurship and business administration.

### CANADIAN AND WORLD STUDIES

**CGF 3M      Physical Geography: Patterns,      1 credit**  
**Processes, and Interactions -**  
**University/College Preparation**

This course examines the major patterns of physical geography and the powerful forces that affect them. Students will investigate the dynamic nature of the earth, the evolving relationship between the planet and its people, and the factors that limit our ability to predict the changes that will occur. Students will use a wide range of geotechnologies and inquiry methods to investigate the distribution and interaction of the elements of their physical environment and to communicate their findings.

*Prerequisite: Grade 9 Geography of Canada, Academic or Applied*

**CGG 3O      Travel and Tourism:      1 credit**  
**A Regional Geographic Perspective - Open**

This course focuses on travel and tourism as a vehicle for the study of selected world regions. Using a variety of geotechnologies and inquiry and communication methods, students will conduct and present case studies that develop their understanding of the unique characteristics of selected world regions; the environmental, cultural, economic, and political factors that influence travel and tourism; and the impact of the travel industry on communities and environments around the world.

*Prerequisite: Grade 9 Geography of Canada, Academic or Applied*

**CGT 3E      Geographics: The Geographer's      1 credit**  
**Toolkit - Workplace Preparation**

This course focuses on giving students practical experiences with geotechnologies and related skills. Students will engage in image interpretation, desktop mapping, analysis using geographic information systems (GIS), use of the global positioning system (GPS), and data collection and management. Students will conduct fieldwork and explore applications and career opportunities in environmental, economic, and political contexts. Students will use a variety of communication tools and methods to present the results of their investigations.

*Prerequisite: Grade 9 Geography of Canada, Academic or Applied*

### CANADIAN AND WORLD STUDIES

**CHA 3U American History - University Preparation 1 credit**

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

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

**CHT 3O World History Since 1900: Global and Regional Perspectives - Open 1 credit**

This course focuses on the major events and issues in world history from 1900 to the present. Students will investigate the causes and effects of global and regional conflicts and the responses of individuals and governments to social, economic, and political changes. Students will use critical-thinking and communication skills to formulate and test points of view, draw conclusions, and present their findings about the challenges facing people in various parts of the world.

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

**CHW 3M World History to the Sixteenth Century - University/College Preparation 1 credit**

This course investigates the history of humanity from earliest times to the sixteenth century. Students will analyse diverse societies from around the world, with an emphasis on the political, cultural, and economic structures and historical forces that have shaped the modern world. They will apply historical inquiry, critical-thinking, and communication skills to evaluate the influence of selected individuals, groups, and innovations and present their conclusions.

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

This course may be offered in French as part of the Extended French program. See page 15 for more details.

### CANADIAN AND WORLD STUDIES

**CLU 3E Understanding Canadian Law - Workplace Preparation 1 credit**

This course gives students practical information about legal issues that directly affect their lives. Students will examine the need for laws in society, the roots of Canada's legal system, the rights and freedoms that people in Canada enjoy, and the basic elements of criminal law and dispute resolution. Through experiences such as mock trials, debates, and case studies, students will apply inquiry and communication skills to develop and express opinions on legal topics of interest to them.

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

**CLU 3M Understanding Canadian Law - University/College Preparation 1 credit**

This course explores Canadian law with a focus on legal issues that are relevant to people's everyday lives. Students will investigate fundamental legal concepts and processes to gain a practical understanding of Canada's legal system, including the criminal justice system. Students will use critical-thinking, inquiry, and communication skills to develop informed opinions on legal issues and apply this knowledge in a variety of ways and settings, including case analysis, legal research projects, mock trials, and debates.

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

### Canadian and World Studies Cooperative Education Program

All Canadian and World Studies courses can be used in the Cooperative Education Program for students considering careers in a variety of fields such as archeology, art history, politics, travel and tourism, environmental studies, journalism, urban and regional planning, teaching, law and historical research.

### COMPUTER STUDIES

**ICS 3C Introduction to Computer Programming - College Preparation 1 credit**

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

**ICS 3U Introduction to Computer Programming - University Preparation 1 credit**

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

### Computer Studies Cooperative Education Program

Computer courses will be of interest to students considering careers in engineering, computer programming, business, computer design and service, animation, information technology, software applications, system analyst, and telecommunications technology.



### ENGLISH (COMPULSORY CREDITS)

**ENG 3C English - College Preparation 1 credit**

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

*Prerequisite: English, Grade 10, Applied*

**ENG 3E English - Workplace Preparation 1 credit**

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will study the content, form, and style of a variety of contemporary informational, graphic, and literary texts; and create oral, written, and media texts in a variety of forms for practical purposes. An important focus will be on using language clearly and accurately in a variety of formal and informal contexts. The course is intended to prepare students for the compulsory Grade 12 workplace preparation course.

*Prerequisite: English, Grade 10, Applied or Essential English, Grade 10, Locally Developed*

**ENG 3U English - University Preparation 1 credit**

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

*Prerequisite: English, Grade 10, Academic*



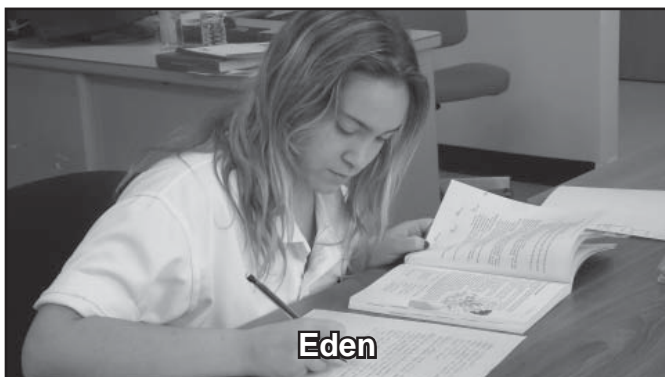
### ENGLISH (COMPULSORY CREDITS)

**OLC 30**      **Ontario Secondary School**      **1 credit**  
**Literacy Course - Open**

This course is designed to help students acquire and demonstrate the cross-curricular literacy skills that are evaluated by the Ontario Secondary School Literacy Test (OSSLT). Students who complete the course successfully will meet the provincial literacy requirement for graduation. Students will read a variety of informational, narrative, and graphic texts and will produce a variety of forms of writing, including summaries, information paragraphs, opinion pieces, and news reports. Students will also maintain and manage a portfolio containing a record of their reading experiences and samples of their writing.

Eligibility requirement: Students who have been eligible to write the OSSLT at least 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.)

*Note: This course may be taken in either Grade 11 or Grade 12.*



### ENGLISH (OPTIONAL CREDITS)

**EMS 30**      **Media Studies - Open**      **1 credit**

This course emphasizes knowledge and skills that will enable students to understand media communication in the twenty-first century and to use media effectively and responsibly. Through analysing the forms and messages of a variety of media works and audience responses to them, and through creating their own media works, students will develop critical thinking skills, aesthetic and ethical judgement, and skills in viewing, representing, listening, speaking, reading, and writing.

*Prerequisite: English, Grade 10, Academic or Applied*

**ETC 3M**      **Canadian Literature -**      **1 credit**  
**University/College Preparation**

This course emphasizes the study and analysis of literary texts by Canadian authors for students with a special interest in Canadian literature. Students will study the themes, forms, and stylistic elements of a variety of literary texts representative of various time periods and of the diverse cultures and regions of Canada, and will respond personally, critically, and creatively to them.

*Prerequisite: English, Grade 10, Academic or Applied*

### English Cooperative Education Program

English courses will be of interest to students considering careers in journalism, research, teaching, library studies, publishing, theatre and communications - radio and television broadcasting.

### ENGLISH AS A SECOND LANGUAGE

For English as a Second Language  
Course Descriptions, please see page 66.

### FRENCH AS A SECOND LANGUAGE

**FEF 3U**                      **Extended French -**                      **1 credit**  
**University Preparation**

This course focuses on developing French-language skills through the study of Canadian francophone authors. Students will analyse works in a variety of genres and will produce various types of written assignments, including a formal essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

*Prerequisite: Grade 10 Extended French*

For more information regarding the Extended French program see page 15.

**FSF 3U**                      **Core French -**                      **1 credit**  
**University Preparation**

This course draws on a variety of themes to promote extensive development of reading and writing skills and to reinforce oral communication skills. Students will gain a greater understanding of French-speaking cultures in Canada and around the world through their reading of a variety of materials, including a short novel or a play. Students will produce various written assignments, including a formal essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

*Prerequisite: Grade 10 Core French, Academic*

**FSF 3O**                      **Core French - Open**                      **1 credit**

This course draws on a broad theme, such as leisure activities, to develop oral communication, reading, and writing skills. Students will give presentations, read a selection of short stories and articles, and produce a variety of written assignments. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

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

### GUIDANCE AND CAREER EDUCATION

**GLE 30\***                      **Advanced Learning Strategies:**                      **1 credit**  
**Skills for Success After**  
**Secondary School - Open**

This course improves students' learning and personal management skills, preparing them to make successful transitions to work, training, and/or postsecondary education destinations. Students will assess their learning abilities and use literacy, numeracy, and research skills and personal management techniques to maximize their learning. Students will investigate trends and resources to support their postsecondary employment, training, and/or education choices and develop a plan to help them meet their learning and career goals.

\*This course is only available to students who have an IEP, with Principal recommendation only.

**GPP 3O**                      **Leadership and Peer Support -**                      **1 credit**  
**Open**

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

**GWL 3O**                      **Designing Your Future -**                      **1 credit**  
**Open**

This course prepares students to make successful transitions to postsecondary destinations as they investigate specific postsecondary options based on their skills, interests, and personal characteristics. Students will explore the realities and opportunities of the workplace and examine factors that affect success, while refining their job search and employability skills. Students will develop their portfolios with a focus on their targeted destination and develop an action plan for future success.

### Guidance and Career Education Cooperative Education Program

Guidance and Career Education is an excellent link with the Cooperative Education Program for students considering careers in any area.

### HEALTH AND PHYSICAL EDUCATION

#### **PPL 30 Healthy Active Living Education - 1 credit Open**

This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities that have the potential to engage students' interests throughout their lives. Students will be encouraged to develop personal competence in a variety of movement skills, and will be given opportunities to practice goal setting, decision making, coping, social, and interpersonal skills. Students will also study the components of healthy relationships, reproductive health, mental health, and personal safety.

#### **Area of Focus:**

The learning expectations of Healthy Active Living Education (PPL 30) course outline the knowledge, skills and health areas that students are expected to demonstrate by the end of each course. Schools may offer focus-courses options for a particular group of physical activities as the vehicle through which students will attain the expectations. Possible focus options are listed below. **Students may select any number of Focus Options at the same grade level each year.**

#### **PAF 30 Personal and Fitness Activities 1 credit**

This course emphasizes regular participation in a variety of enjoyable fitness activities that promote life-long healthy active living. Student learning will include the application of movement principles to refine their skills, participation in a variety of fitness activities (e.g. aerobics, fitness training, self-defense etc) that enhance personal competence and health, and examination of issues related to healthy living. Reference should be made to the Healthy Active Living Education open course description for Grade 11 health curriculum expectations.

#### **PAL 30 Large Group Activities 1 credit**

This course emphasizes regular participation in a variety of enjoyable large group activities that promote life-long healthy active living. Student learning will include the application of movement principles to refine their skills, participation in a variety of large group/team sport activities (e.g. soccer, field-lacrosse, rugby, ultimate Frisbee) that enhance personal competence, fitness and health and the examination of issues related to healthy living. Reference should be made to the course description for Grade 11 for health areas of study.

### HEALTH AND PHYSICAL EDUCATION

#### **PAI 30 Individual and Small Group 1 credit**

This course emphasizes regular participation in a variety of enjoyable individual and small group activities that promote life-long healthy active living. Student learning will include the application of movement principles to refine individual and small group skills (e.g. racquet sports, cross country skiing, orienteering, etc), participation in a variety of activities that enhance personal competence, fitness and health and the examination of issues related to healthy living. Reference should be made to the course description for Grade 11 for health areas of study.

#### **PAR 30 Rhythm and Movement 1 credit**

This course emphasizes regular participation in a variety of rhythm and movement activities that promote life-long healthy active living. Students will experience the health-related values of fitness through dance, and explore the elements of technique, composition and performance of movement related to dance. creative, folk, rhythmic and popular dance will be experienced. Reference should be made to the Healthy Active Living Education open course description for Grade 11 for health areas of study.

#### **PPZ 30 Health for Life - Open 1 credit**

This course helps students develop a personalized approach to healthy living. Students will examine the factors that affect their own health and the health of individuals as members of the community. They will learn about the components of the VITALITY approach to healthy living – an initiative that promotes healthy eating, an active lifestyle, and a positive self-image. Throughout this course, students will develop the skills necessary to take charge of and improve their own health, as well as to encourage others to lead healthy lives.

#### **Health and Physical Education Cooperative Education Program**

Health and Physical Education courses will be of interest to students considering careers in education, personal fitness training, sports management, kinesiology, nursing, and recreation therapy.

### INTERNATIONAL LANGUAGES

**LBA CU/ LYX CU**      **International Languages, Level 3 - University Preparation**      **1 credit**

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

LWG CU	– German	– 1 credit
LWI CU/LWI CO	– Italian	– 1 credit
LKJ CU	– Japanese	– 1 credit
LWS CU	– Spanish	– 1 credit

#### International Languages Cooperative Education Program

International Language courses can be used in the Cooperative Education Program for students considering careers in a variety of fields such as travel & tourism, politics, teaching and international business.

### MATHEMATICS

**MBF 3C**      **Foundations for College Mathematics - College Preparation**      **1 credit**

This course enables students to broaden their understanding of mathematics as a problemsolving tool in the real world. Students will extend their understanding of quadratic relations; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; develop their ability to reason by collecting, analysing, and evaluating data involving one variable; connect probability and statistics; and solve problems in geometry and trigonometry. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

*Prerequisite: Foundations of Mathematics, Grade 10, Applied*

### MATHEMATICS

**MCF 3M**      **Functions and Applications - University/College Preparation**      **1 credit**

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.

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

**MCR 3U**      **Functions - University Preparation**      **1 credit**

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

*Prerequisite: Grade 10 Principles of Mathematics, Academic*

**MEL 3E**      **Mathematics for Work and Everyday Life - Workplace Preparation**      **1 credit**

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

*Prerequisite: Grade 9 Foundations of Mathematics, Applied, or Essential Mathematics, Grade 10, Locally Developed*

#### Mathematics Cooperative Education Program

Mathematics courses can be used in the Cooperative Education Program for students considering careers in business management, accounting, financial planning, teaching, and engineering.

### NATIVE STUDIES

#### **NBE 3C Contemporary Aboriginal Voices - 1 credit College Preparation**

This course emphasizes historical and contemporary issues that affect the relationship between Aboriginal peoples and Canadian governments. Students will examine legal, political, social, and economic issues; key aspects of the Indian Act and its revisions that have an impact on the daily lives of Aboriginal persons; the different types of relationships that Aboriginal peoples have established with other nations throughout history; and the methodology of historical inquiry.

#### **NBE 3C Contemporary Aboriginal Voices - 1 credit College Preparation**

This course emphasizes the development of literacy, critical thinking, and communication skills through the study of works in English by Aboriginal writers. Students will study the content, form, and style of informational texts and literacy and media works, and will develop an appreciation of the wealth and complexity of Aboriginal writing. Students will also write reports, correspondence, and persuasive essays, and analyse the relationship between media forms and audiences. An important focus will be on establishing appropriate voice and using business and technical language with precision and clarity.

*Prerequisite: Grade 10 English, Academic or Applied*

#### **NBE 3E Contemporary Aboriginal Voices - 1 credit Workplace Preparation**

This course emphasizes the development of literacy, critical thinking, and communication skills through the study of works in English by Aboriginal writers. Students will study the content, form, and style of informational texts and literacy and media works, and will develop an appreciation of the wealth and complexity of Aboriginal writing. Students will also write explanations, letters, and reports, and will investigate the connections between media forms and audiences. An important focus will be on using language clarity, accurately, and effectively in a variety of contexts.

*Prerequisite: Grade 10 English, Academic or Applied*

### NATIVE STUDIES

#### **NBV 3E Aboriginal Beliefs, Values and 1 credit Aspirations in Contemporary Society - Workplace Preparation**

This course focuses on the beliefs, values, and aspirations of Aboriginal peoples in Canada. Students will examine issues of identity facing Indian, Métis, and Inuit peoples, and their relationships to land and nature, as well as to one another within their communities and working environments. Students will also learn how traditional and contemporary beliefs and values influence the present-day aspirations and actions of Aboriginal peoples.

*Prerequisite: Grade 10 Aboriginal Peoples in Canada, Open, or Canadian History Since World War I, Academic or Applied*

#### **NBV 3C Aboriginal Beliefs, Values and 1 credit Aspirations in Contemporary Society - College Preparation**

This course focuses on the beliefs, values, and aspirations of Aboriginal peoples in Canada. Students will examine world views of Aboriginal peoples and the political, economic, cultural, and social challenges facing individuals and communities. Students will also learn how traditional and contemporary beliefs and values influence the aspirations and actions of Aboriginal peoples.

*Prerequisite: Grade 10 Aboriginal Peoples in Canada, Open, or Canadian History Since World War I, Academic or Applied*

#### **NDA 3M Current Aboriginal Issues in Canada - 1 credit University/College Preparation**

This course focuses on existing and emerging issues of importance to Aboriginal peoples in Canada. Students will investigate issues related to identity, relationships among Aboriginal peoples and between Aboriginal peoples and other Canadians, sovereignty principles as presented by Aboriginal peoples, and the contemporary challenges posed by these issues. Students will also examine such topics as language preservation, the responsibilities of Aboriginal women and men, and the need for dialogue between Aboriginal and non-Aboriginal peoples.

*Prerequisite: Grade 10 Aboriginal Peoples in Canada, Open, or Canadian History Since World War I, Academic or Applied*

### SCIENCE

**SBI 3C**                      **Biology -**                      **1 credit**  
**College Preparation**

This course focuses on the processes that occur in biological systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, genetics, the anatomy of mammals, and the structure of plants and their role in the natural environment. Emphasis will be placed on the practical application of concepts, and on the skills needed for further study in various branches of the life sciences and related fields.

*Prerequisite: Grade 10 Science, Academic or Applied*

**SBI 3U**                      **Biology -**                      **1 credit**  
**University Preparation**

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

*Prerequisite: Grade 10 Science, Academic*

**SCH 3U**                      **Chemistry -**                      **1 credit**  
**University Preparation**

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

*Prerequisite: Grade 10 Science, Academic*

**SHX 33**                      **Horticulture**                      **1 credit**  
**Open-Locally Developed**

This course provides students with the opportunity to understand the role of agriculture in the Niagara Region and beyond. Students will learn concepts and theories as they conduct investigations in the areas of land management, plant science, safe use of agricultural equipment and supplies, crop propagation and experimentation, research, critical thinking and analysis.

### SCIENCE

**SPH 3U**                      **Physics -**                      **1 credit**  
**University Preparation**

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

*Prerequisite: Grade 10 Science, Academic*

**SVN 3E**                      **Environmental Science -**                      **1 credit**  
**Workplace Preparation**

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

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

**SVN 3M**                      **Environmental Science -**                      **1 credit**  
**University/College Preparation**

This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in life after secondary school. Students will explore a range of topics, including the role of science in addressing contemporary environmental challenges; the impact of the environment on human health; sustainable agriculture and forestry; the reduction and management of waste; and the conservation of energy. Students will increase their scientific and environmental literacy and examine the interrelationships between science, the environment, and society in a variety of areas.

*Prerequisite: Grade 10 Science, Academic or Applied*

### SCIENCE

**SAN 33**                      **Animal Science**                      **1 credit**  
**Locally Developed - Open**

This course focuses on the processes involved in the biological systems of animals, both domestic and wild. Students will learn concepts and theories related to animal anatomy and physiology, adaptations, nutrition, the immune system and defenses against disease. Career opportunities related to biology and working with animals will be explored. Throughout the course, emphasis will be placed on the practical application of concepts related directly to students' experiences in their daily lives and in the workplace.

#### Science Cooperative Education Program

Science courses will be of interest to students considering careers in such areas as human and veterinary medicine, chemistry, biology, physics, engineering and other related fields.

### SOCIAL SCIENCES AND THE HUMANITIES

**HIP 3E**                      **Managing Personal Resources -**                      **1 credit**  
**Workplace Preparation**

This course prepares students for living independently and working successfully with others. Students will learn to manage their personal resources (including talent, money, and time), to develop interpersonal skills, and to understand economic influences on workplace issues, in order to make wise and responsible personal and occupational choices. The course emphasizes the achievement of expectations through practical experiences and introduces students to skills used in researching and investigating resource management.

**HIR 3C**                      **Managing Personal and**                      **1 credit**  
**Family Resources - College Preparation**

This course explores how to use human, material, and community resources effectively, and how to make informed choices with respect to clothing purchases, finance, food and nutrition, housing, and transportation. Students will learn about the dynamics of human interaction; how to make responsible choices in their transition to postsecondary education and careers; and strategies to enable them to manage time, talent, and money effectively. This course also introduces students to skills used in researching and investigating resource management.

### SOCIAL SCIENCES AND THE HUMANITIES

**HLS 30**                      **Living Spaces and Shelter -**                      **1 credit**  
**Open**

This course analyses how different types of living spaces and forms of shelter meet people's physical, social, emotional, and cultural needs and reflect society's values, established patterns of living, and economic and technological developments. Students will learn how to make practical decisions about where to live and how to create functional and pleasing environments, and will explore occupational opportunities related to housing and design. They will also learn skills used in researching and investigating living accommodations and housing.

**HNC 30**                      **Fashion and Creative**                      **1 credit**  
**Expression - Open**

This course explores what clothing communicates about the wearer and how it becomes a creative and entrepreneurial outlet through the design and production processes. Students will learn, through practical experiences, about the nature of fashion design; the characteristics of fibres and fabrics; the construction, production, and marketing of clothing; and how to plan and care for a wardrobe that is appropriate for an individual's appearance, activities, employment, and lifestyle. Students will develop research skills as they explore the evolution of fashion and its relationship to society, culture, and individual psychology.

**HPC 30**                      **Parenting - Open**                      **1 credit**

This course focuses on the skills and knowledge needed to promote the positive and healthy nurturing of children, with particular emphasis on the critical importance of the early years to human development. Students will learn how to meet the developmental needs of young children, communicate and discipline effectively, and guide early behaviour. They will have practical experiences with infants, toddlers, and preschoolers, and will learn skills in researching and investigating questions relating to parenting.

#### Social Sciences/ Humanities Cooperative Education Program

Social Science & Humanities courses will be of interest to students considering careers in teaching, social work, politics, law enforcement, journalism, and anthropology.

### SOCIAL SCIENCES AND THE HUMANITIES

**HPW 3C Living and Working With Children - College Preparation 1 credit**

This course focuses on the well-being of children in families and community settings. Students will study child behaviour and child development in the context of relationships with parents and others in the community, and will learn through research and by observing and interacting with children. This course prepares students for further study of children, familiarizes them with occupational opportunities related to working with children, and introduces them to skills used in researching and investigating children's behaviour in response to others.

**HRF 30 World Religions: Beliefs and Daily Life - Open 1 credit**

This course introduces students to the range and diversity of world religions, and examines how systems of belief affect individual lives and social relationships. Students will learn about a variety of religious beliefs, teachings, traditions, and practices. The course also helps students to develop skills used in researching and investigating topics related to world religions.

**HRT 3M World Religions: Beliefs, Issues and Religious Traditions - University/College Preparation 1 credit**

This course enables students to discover what others believe and how they live, and to appreciate their own unique heritage. Students will learn about the teachings and traditions of a variety of religions, the connections between religion and the development of civilizations, the place and function of religion in human experience, and the influence of a broad range of religions on contemporary society. This course also introduces students to skills used in researching and investigating world religions.

### SOCIAL SCIENCES AND THE HUMANITIES

**HSP 3M Introduction to Anthropology, Psychology, and Sociology - University/College Preparation 1 credit**

This course introduces the theories, questions, and issues that are the major concerns of anthropology, psychology, and sociology. Students will develop an understanding of the way social scientists approach the topics they study and the research methods they employ. Students will be given opportunities to explore theories from a variety of perspectives and to become familiar with current thinking on a range of issues that have captured the interest of classical and contemporary social scientists in the three disciplines.

**HZB 30 Philosophy: The Big Questions - Open 1 credit**

This course addresses three (or more) of the following questions: What is a person? What is a meaningful life? What are good and evil? What is a just society? What is human knowledge? How do we know what is beautiful in art, music, and literature? Students will learn critical thinking skills in evaluating philosophical arguments related to these questions, as well as skills used in researching and investigating various topics in philosophy.





## TECHNOLOGICAL EDUCATION

In broad-based technology, courses in Grades 10, 11 and 12 that lead to apprenticeship or certification programs, or that are part of school-work transition programs, may be planned for up to 330 hours of scheduled instructional time. This additional instructional time allows for the practice and refinement of skills needed to raise the quality of students' performance to the levels required for certification, entry into apprenticeship programs, or participation in school-work transition programs. (It may also support articulation agreements for advanced standing or preferred entrance into specialized programs.) Instructional time may be increased by increments of 55 hours; for each additional 55 hours, students earn an additional half-credit. **A maximum of three credits may be earned for the successful completion of a 330-hour course.** The number of additional credits and the nature of the assignments to be completed must be established before the start of the course. **Emphasis courses and their course codes are listed for each broad-based technology.**

### COMMUNICATIONS TECHNOLOGY

**TGJ 3M      Communications Technology -      1 credit**  
**University/College Preparation**

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

#### **Emphasis Courses:**

TGG3M - Print and Graphic Communications  
TGI3M - Interactive New Media and Animation  
TGP3M - Photography and Digital Imaging  
TGV3M - TV, Video and Movie Production  
TGR3M - Radio, Audio and Sound Production

## TECHNOLOGICAL EDUCATION

**TGJ 3O      Communications Technology:      1 credit**  
**Broadcast and Print Production - Open**

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

### COMPUTER TECHNOLOGY

**TEJ 3E      Computer Technology -      1 credit**  
**Workplace Preparation**

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

#### **Emphasis Courses:**

TET3E - Information Technology Support  
TEC3E - Computer Repair  
TEW3E - Network Support



### TECHNOLOGICAL EDUCATION

#### TEJ 3M Computer Engineering Technology - 1 credit University/College Preparation

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

#### Emphasis Courses:

TEL3M - Electronics  
TER3M - Robotics and Control Systems  
TEN3M - Networking  
TEI3M - Interfacing

### CONSTRUCTION TECHNOLOGY

#### TCJ 3C Construction Engineering Technology - College Preparation 1 credit

This course focuses on the development of knowledge and skills related to residential construction. Students will gain hands on experience using a variety of construction materials, processes, tools, and equipment; learn about building design and planning construction projects; create and interpret working drawings and sections; and learn how the Ontario Building Code and other regulations and standards apply to construction projects. Students will also develop an awareness of environmental and societal issues related to construction technology, and explore career opportunities in the field.

#### Emphasis Courses:

TCS3C - Construction Management and Science  
TCY3C - Civil Engineering

### TECHNOLOGICAL EDUCATION

#### TCJ 3E Construction Technology - Workplace Preparation 1 credit

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

#### Emphasis Courses:

TCP3E - Plumbing  
TCE3E - Electrical/Network Cabling  
TCM3E - Masonry  
TCH3E - Heating and Cooling  
TCC3E - Carpentry

#### TWJ 3E Custom Woodworking - Workplace Preparation 1 credit

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.



## TECHNOLOGICAL EDUCATION

### GREEN INDUSTRIES

**THJ 3E**                      **Green Industries -**                      **1 credit**  
**Workplace Preparation**

This course enables students to develop knowledge and skills related to agriculture, floristry, forestry, horticulture, and landscaping. Students will learn to identify a broad range of plant and animal species; examine factors that affect the growth of plants and animals and the quality of products derived from them; and develop process, design, and maintenance skills required in the green industries. Students will also learn about safe and healthy working practices, develop an awareness of environmental and societal issues related to green industry activities, and learn about apprenticeships and other postsecondary education and training opportunities, as well as employment opportunities that may be pursued directly after graduation.

**Emphasis Courses:**

- THG3E - Agriculture
- THF3E - Floristry
- THH3E - Horticulture
- THL3E - Landscape Construction and Maintenance

### HAIRSTYLING AND AESTHETICS

**TXJ 3E**                      **Hairstyling & Aesthetics -**                      **1 credit**  
**Workplace Preparation**

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

**Emphasis Courses:**

- TXH3E - Hairstyling
- TXA3E - Aesthetics

## TECHNOLOGICAL EDUCATION

### HEALTH CARE

**TPJ 3C**                      **Health Care -**                      **1 credit**  
**College Preparation**

This course focuses on the development of knowledge and skills that will benefit students planning a career in the health care field. Students will learn about human anatomy and physiology, homeostasis, vital signs, disease prevention and treatment, how lifestyle choices affect health and well-being, and conventional and complementary methods of disease prevention and treatment. Students will develop an awareness of health and safety issues, environmental and societal issues related to health care, and career opportunities in the field.

**TPJ 3M**                      **Health Care -**                      **1 credit**  
**University/College Preparation**

This course focuses on the development of knowledge and skills that will benefit students planning a career in the health care field. Students will learn about human anatomy and physiology, homeostasis, vital signs, disease prevention and treatment, how lifestyle choices affect health and well-being, and conventional and complementary methods of disease prevention and treatment. Students will develop an awareness of workers' health and safety issues, environmental and societal issues related to health care, and career opportunities in the field.

### HOSPITALITY AND TOURISM

**TFJ 3C**                      **Hospitality & Tourism -**                      **1 credit**  
**College Preparation**

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

**Emphasis Courses:**

- TFR3C - Culinary Arts/Management
- TFN3C - Applied Nutrition
- TFT3C - Tourism and Travel Planning

## TECHNOLOGICAL EDUCATION

**TFJ 3E Hospitality & Tourism - 1 credit**  
**Workplace Preparation**

This course enables students to acquire knowledge and skills related to the food and beverage services sector of the tourism industry. Students will learn how to prepare, present, and serve food using a variety of tools and equipment and will develop an understanding of the fundamentals of providing high quality service to ensure customer satisfaction and the components of running a successful event or activity. Students will develop an awareness of health and safety practices, environmental and societal issues, and career opportunities in the food and beverage services sector.

### Emphasis Courses:

TFB3E - Baking  
TFC3E - Cooking  
TFE3E - Event Planning

## MANUFACTURING TECHNOLOGY

**TMJ 3C Manufacturing Technology - 1 credit**  
**College Preparation**

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

### Emphasis Courses:

TMC3C - Computer Aided Manufacturing  
TMI3C - Industrial Maintenance  
TMP3C - Precision Machining  
TMT3C - Robotics and Control Technician  
TMY3C - Welding Technician

## TECHNOLOGICAL EDUCATION

**TMJ 3E Manufacturing Technology - 1 credit**  
**Workplace Preparation**

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

### Emphasis Courses:

TMO3E - Machine Operator  
TMW3E - Welding

**TMJ 3M Manufacturing Engineering 1 credit**  
**Technology - University/College Preparation**

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

### Emphasis Courses:

TMM3M - Mechanical Engineering  
TMR3M - Robotics and Control Systems



Welland Centennial

### TECHNOLOGICAL EDUCATION

#### TECHNOLOGICAL DESIGN

**TDJ 3M                      Technological Design -                      1 credit**  
**University/College Preparation**

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

#### **Emphasis Courses:**

TDP3M - Apparel and Textile Design  
TDA3M - Architectural Design  
TDR3M - Robotic and Control System Design  
TDV3M - Interior Design  
TDM3M - Mechanical and Industrial Design

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**TDJ 30                      Technological Design and the                      1 credit**  
**Environment - Open**

This course enables students to apply a systematic process for researching, designing, building, and assessing solutions to address specific human and environmental challenges. Through their work on various projects, students will explore broad themes that may include aspects of industrial design, mechanical design, architectural design, control system design, and/or apparel design. Students will develop an awareness of environmental and societal issues related to technological design, and will learn about secondary and postsecondary pathways leading to careers in the field.



### TECHNOLOGICAL EDUCATION

#### TRANSPORTATION TECHNOLOGY

**TTJ 3C                      Transportation Technology -                      1 credit**  
**College Preparation**

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

#### **Emphasis Courses:**

TTB3C - Auto Body  
TTA3C - Auto Service  
TTS3C - Small Engine/Recreational Equipment

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**TTJ 30                      Transportation Technology:                      1 credit**  
**Vehicle Ownership - Open**

This general interest course enables students to become familiar with the options and features of various vehicles, issues of registration, and the legal requirements affecting vehicle owners. Students will also learn about vehicle financing and insurance, vehicle maintenance, emergency procedures, and the responsibilities of being a vehicle owner. Students will develop an awareness of environmental and societal issues related to vehicle ownership and use, and will explore career opportunities in the transportation industry.

#### **Technological Cooperative Education Program**

All technological courses can be used in the Cooperative Education Program for students considering careers in a variety of fields such as electricity, tourism, plumbing, manufacturing and automotive technology.

**OYAP** Students may have the opportunity to begin an apprenticeship while earning these high school credits. For more information see page 9.

## ARTS

### DRAMA

**ADA 4M**                      **Drama -**                      **1 credit**  
**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 analyse how the knowledge and skills developed in drama are related to their personal skills, social awareness, and goals beyond secondary school.

*Prerequisite: Grade 11 Drama, University/College*

#### Drama Focus Courses:

ADB 4M - Drama - Music Theatre  
 ADD 4M - Drama - Production

**ADA 4E**                      **Drama -**                      **1 credit**  
**Workplace Preparation**

This course requires students to create and present a variety of dramatic works relevant to the workplace. Students will develop character both through hands-on experience and project-based learning to build trust and collaborative skills and develop self-confidence. Students will also explore skills related to the study of drama that can be applied in the workplace.

*Prerequisite: Grade 11 Drama, Open*

#### Drama Focus Courses:

ADD 4E - Drama - Production

### EXPLORING AND CREATING THE ARTS

**AEA 4O**                      **Exploring and Creating the Arts**                      **1 credit**  
**- Open**

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

## ARTS

### MUSIC

**AMU 4M**                      **Music -**                      **1 credit**  
**University/College Preparation**

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

*Prerequisite: Grade 11 Music, University/College*

#### Music Focus Courses:

AMG 4M - Guitar Music  
 AMH 4M - Stage - Band Music  
 AMI 4M - Instrumental Music - Band  
 AMK 4M - Keyboard Music  
 AMR 4M - Repertoire  
 AMS 4M - Instrumental Music - Strings  
 AMT 4M - Music Theatre  
 AMV 4M - Music - Vocal/Choral

**AMU 4E**                      **Music -**                      **1 credit**  
**Workplace Preparation**

This course provides students with the fundamental knowledge and skills needed to succeed in the music workplace. Students will, at a level consistent with previous experience, perform appropriate musical works. Independently and collaboratively, students will use current technology and the creative and critical analysis processes to plan, produce, and market music presentations that reflect a broad spectrum of workplace contexts. In addition, students will explore ethical and safe practices related to music.

*Prerequisite: Grade 11 Music, Open*

## ARTS

### MEDIA ARTS

#### ASM 4E      Media Arts - Workplace      1 credit

This course focuses on a practical approach to a variety of media arts challenges specific to the interests of the student and provides students with opportunities to examine media arts in relationship to the world of work. Students will develop works that express their views on contemporary issues and will create portfolios suitable for use in postsecondary work experiences. Students will critically analyse the role of media artists in shaping audience perceptions of identity, culture, and community values, particularly within the context of the workplace.

*Prerequisite: Grade 11 Media Arts, Open*

#### ASM 4M      Media Arts - University/College Preparation      1 credit

This course emphasizes the refinement of media arts skills through the creation of a thematic body of work by applying traditional and emerging technologies, tools, and techniques such as multimedia, computer animation, installation art, and performance art. Students will develop works that express their views on contemporary issues and will create portfolios suitable for use in either career or postsecondary education applications. Students will critically analyse the role of media artists in shaping audience perceptions of identity, culture, and community values.

*Prerequisite: Grade 11 Media Arts, University/College*

### DANCE

#### ATC 4M      Dance - University/College Preparation      1 credit

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

*Prerequisite: Grade 11 Dance, University/College*

#### Dance Focus Courses:

ATP 4M - Dance - Performance Practice

## ARTS

#### ATC 4E      Dance - Workplace Preparation      1 credit

This course enables students to develop performance and interpersonal skills through the study of dance. Students will apply the elements of dance and the tools of composition to develop a physical vocabulary that can be used to create and communicate through dance. Students will research and explain how physical, intellectual, and artistic skills developed in the dance arts are transferable to a wide range of careers and workplace environments. They will develop an understanding of practices associated with healthy living, the benefits of self-discipline, and the importance of continuing engagement in the arts.

*Prerequisite: Grade 11 Dance, Open*

### VISUAL ARTS

#### AVI 4M      Visual Arts - University/College Preparation      1 credit

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

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

#### Visual Arts Focus Courses:

AWD 4M - Visual Arts - Visual Design

AWM 4M - Visual Arts - Drawing and Painting

AWQ 4M - Visual Arts - Photography

AWU 4M - Visual Arts - Cultural/Historical Studies



## ARTS

**AVI 4E**                      **Visual Arts -**                      **1 credit**  
**Workplace Preparation**

This course focuses on a practical approach to a variety of art and design projects related to the workplace. Students will use the creative process to produce a traditional and/or digital portfolio of their work in a variety of media. Students may focus on various aspects of visual arts, including advertising, ceramics, fashion design, graphic arts, jewellery design, and/or web design.

*Prerequisite: Grade 11 Visual Arts, Open*

### Arts Cooperative Education Program

The Arts courses can be used in the Cooperative Education Program for students considering careers in teaching, music, photography, graphic arts, advertising and animation.



Sir Winston Churchill



West Park

## BUSINESS STUDIES

**BAN 4E**                      **Accounting for a Small**                      **1 credit**  
**Business - Workplace Preparation**

This course further develops students' understanding of the fundamentals of accounting by having them examine each component of the accounting cycle, with an emphasis on the merchandising business. Students will use computer applications software to learn how accounting is practised in the workplace. Students will acquire an understanding of payroll systems, inventory, specialized journals, subsidiary ledgers, income tax reporting, and budgeting.

*Prerequisite: Grade 11 Accounting Essentials, Workplace Preparation*

**BAT 4M**                      **Financial Accounting Principles -**                      **1 credit**  
**University/College Preparation**

This course introduces students to advanced accounting principles that will prepare them for postsecondary studies in business. Students will learn about financial statements for various forms of business ownership and how those statements are interpreted in making business decisions. This course expands students' knowledge of sources of financing, further develops accounting methods for assets, and introduces accounting for partnerships and corporations.

*Prerequisite: Grade 11 Financial Accounting Fundamentals, University/College preparation*

This course may be available "on-line" as an eLearning course. See your Guidance Counsellor.

**BBB 4E**                      **International Business**                      **1 credit**  
**Essentials - Workplace Preparation**

This course provides an introduction to international business. Students will explore the economic relationships that Canada has developed with other nations, and the impact of these relationships on productivity, prices, and variety of goods. This course also introduces students to a variety of career opportunities in international business.



## BUSINESS STUDIES

**BBB 4M International Business 1 credit**  
**Fundamentals - University/College Preparation**

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

**BDV 4C Entrepreneurship: Venture 1 credit**  
**Planning in an Electronic Age-**  
**College Preparation**

This course provides students with the opportunity to develop and apply entrepreneurial skills through the creation of a venture plan that capitalizes on the potential of e-commerce. Students will research and identify an opportunity for a venture. They will then complete the components of a venture plan that includes a website.

**BOG 4E Business Leadership: 1 credit**  
**Becoming a Manager - Workplace Preparation**

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.

**BOH 4M Business Leadership: 1 credit**  
**Management Fundamentals -**  
**University/College Preparation**

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

## BUSINESS STUDIES

**BTX 4C Information and Communication 1 credit**  
**Technology: Multimedia Solutions -**  
**College Preparation**

This course provides students with the opportunity to apply their information and communication technology skills while working in a team environment. Through a project-based approach, students will have opportunities to integrate common business software applications and apply multimedia techniques. Students will further their understanding of electronic business and e-commerce environments. The skills acquired in this course will prepare students for success in postsecondary studies and in their future careers.

*Prerequisite: Grade 11 Information and Communication Technology: The Digital Environment, Open*

**BTX 4E Information and Communication 1 credit**  
**Technology in the Workplace -**  
**Workplace Preparation**

This course provides students with the opportunity to further develop essential workplace skills in information and communication technology while working in a team environment. Using a project-based approach, students will focus on integrating software applications and applying multimedia software features. Students will expand their understanding of e-business and e-commerce environments and workplace ethics. This course will prepare students for a successful transition from secondary school to the workplace.

*Prerequisite: Grade 11 Information and Communication Technology: The Digital Environment, Open*

### Business Studies Cooperative Education Program

All business courses can be used in the Cooperative Education Program for students considering careers in a variety of fields such as accounting, human resources, marketing and advertising, travel and tourism, entrepreneurship and business administration.

### CANADIAN AND WORLD STUDIES

#### CGO 4M Geomatics: Geotechnologies in Action - University/College Preparation 1 credit

This course gives students experience with using geotechnologies to develop solutions to real-world problems involving physical and human geography. Students will extend their knowledge of geomatics in the areas of cartography, geographic information systems (GIS), the global positioning system (GPS), and remote sensing. Students will develop critical thinking and communication skills as they apply geotechnologies and geographic inquiry methods to devise and present ways of improving conditions for people and the environment.

*Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

#### CGR 4E The Environment and Resource Management - Workplace Preparation 1 credit

This course examines the influence of human activities on the natural environment. Students will study ecosystem structures and processes, the ecological impact of human activities, and methods of responsible resource management. Students will apply geotechnologies and geographic inquiry methods to develop and present practical solutions to environmental and resource management issues. In the process, students' problem-solving and communication skills will be enhanced in preparation for careers and the workplace.

*Prerequisite: Grade 9 Geography of Canada, Academic or Applied*



### CANADIAN AND WORLD STUDIES

#### CGR 4M The Environment and Resource Management - University/College Preparation 1 credit

This course investigates the complexity and fragility of ecosystems and the pressures human activities place on them. Students will examine ecological processes, the principles of sustainability, and strategies for resource management, with a focus on the challenges of environmental degradation and resource depletion. Students will use geotechnologies and skills of geographic inquiry to explain and evaluate various approaches to achieving a more sustainable relationship between people and their environment.

*Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

#### CGU 4C World Geography: Urban Patterns and Interactions - College Preparation 1 credit

This course examines cities around the world and the social, political, cultural, environmental, and economic factors that shape them. Students will study urban structures and systems, the impact of migrations on cities, and the impact of cities on the environment. Students will use geotechnologies and apply geographic concepts and inquiry methods to analyse issues and problems related to urban development and to formulate potential solutions.

*Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

#### CGU 4U World Geography: Human Patterns and Interactions - University Preparation 1 credit

This course examines how humans interact with their natural environments and with each other. Students will study the influence of spatial, political, economic, and social factors on settlement patterns, human migration, cultural change, globalization, and environmental trends. Students will use geotechnologies and skills of geographic inquiry and analysis to extend their knowledge of human geography, identify and explain current trends and patterns, and predict future ones.

*Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

### CANADIAN AND WORLD STUDIES

**CGW 4U Canadian and World Issues: A Geographic Analysis - University Preparation 1 credit**

This course examines the global challenges of creating a sustainable and equitable future, focusing on current issues that illustrate these challenges. Students will investigate a range of topics, including cultural, economic, and geopolitical relationships, regional disparities in the ability to meet basic human needs, and protection of the natural environment. Students will use geotechnologies and skills of geographic inquiry and analysis to develop and communicate balanced opinions about the complex issues facing Canada and a world that is interdependent and constantly changing.

*Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

**CHI 4U Canada: History, Identity, and Culture - University Preparation 1 credit**

This course explores the challenges associated with the formation of a Canadian national identity. Students will examine the social, political, and economic forces that have shaped Canada from the pre-contact period to the present and will investigate the historical roots of contemporary issues from a variety of perspectives. Students will use critical-thinking and communication skills to consider events and ideas in historical context, debate issues of culture and identity, and present their own views.

*Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

**CHM 4E Adventures in World History - Workplace Preparation 1 credit**

This course explores a variety of human experiences in world history from earliest times to the present. Students will learn about a wide range of societies and cultures, examining such things as systems of government, technological developments, work, art, and religion. Students will apply methods of research and inquiry to examine human societies in many different times and places and to communicate points of view about their findings.

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

### CANADIAN AND WORLD STUDIES

**CHY 4C World History: The West and the World - College Preparation 1 credit**

This course explores the history of the world since the sixteenth century, emphasizing the interaction between the emerging West and other regions of the world. Students will learn about a variety of economic, social, and political systems and the changes they have undergone over time. Students will apply their developing skills of historical inquiry to understand and communicate ideas about the forces that have formed our modern world.

*Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

**CHY 4U World History: The West and The World - University Preparation 1 credit**

This course investigates the major trends in Western civilization and world history from the sixteenth century to the present. Students will learn about the interaction between the emerging West and other regions of the world and about the development of modern social, political, and economic systems. They will use critical-thinking and communication skills to investigate the historical roots of contemporary issues and present their conclusions.

*Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

**CIA 4U Analysing Current Economic Issues - University Preparation 1 credit**

This course investigates the nature of the competitive global economy and explores how individuals and societies can gain the information they need to make appropriate economic decisions. Students will learn about the principles of micro- and macroeconomics, apply economic models and concepts to interpret economic information, assess the validity of statistics, and investigate marketplace dynamics. Students will use economic inquiry and communication skills to analyse current economic issues, make informed judgements, and present their findings.

*Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

This course may be available “on-line” as an eLearning course. See your Guidance Counsellor.

## CANADIAN AND WORLD STUDIES

**CLN 4U Canadian and International Law - University Preparation 1 credit**

This course examines elements of Canadian and international law in social, political, and global contexts. Students will study the historical and philosophical sources of law and the principles and practices of international law and will learn to relate them to issues in Canadian society and the wider world. Students will use critical-thinking and communication skills to analyse legal issues, conduct independent research, and present the results of their inquiries in a variety of ways.

*Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

**CPW 4U Canadian and World Politics - University Preparation 1 credit**

This course examines Canadian and world politics from a variety of perspectives. Students will investigate the ways in which individuals, groups, and states work to influence domestic and world events, the role of political ideologies in national and international politics, and the dynamics of international cooperation and conflict resolution. Students will apply critical-thinking and communication skills to develop and support informed opinions about current political conflicts, events, and issues.

*Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

### Canadian and World Studies Cooperative Education Program

All Canadian and World Studies courses can be used in the Cooperative Education Program for students considering careers in a variety of fields such as archeology, art history, politics, travel and tourism, environmental studies, journalism, urban and regional planning, teaching, law and historical research.

## CLASSICAL AND INTERNATIONAL LANGUAGES

**LVV 4U Classical Civilization University Preparation 1 credit**

This course allows students to explore the beliefs and achievements of the classical world, which have shaped Western thought and civilization. Students will investigate such aspects of classical culture as its mythology, art, literature, and philosophy, as well as elements of ancient Greek and Latin, through a variety of activities such as dramatizations, audio-visual presentations, and discussions. By reading classical authors in English and examining archaeological evidence, students will enhance both their communication skills and their ability to think critically and creatively.

*Prerequisite: English, Grade 10, Academic or Applied*

**LBA DU – International Languages - University Preparation 1 credit**  
**LYX DU**

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

LWG DU - German - 1 credit  
LWI DU/LWI DO - Italian - 1 credit  
LKJ DU - Japanese - 1 credit  
LWS DU - Spanish - 1 credit

### International Languages Cooperative Education Program

International Languages can be the perfect link in the Cooperative Education Program for students considering careers in travel & tourism, international law & business, teaching and politics.

### COMPUTER STUDIES

**ICS 4C      Computer Programming -      1 credit**  
**College Preparation**

This course further develops students' computer programming skills. Students will learn object-oriented programming concepts, create object-oriented software solutions, and design graphical user interfaces. Student teams will plan and carry out a software development project using industry-standard programming tools and proper project management techniques. Students will also investigate ethical issues in computing, and expand their understanding of environmental issues, emerging technologies, and computer-related careers.

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

**ICS 4U      Computer Science -      1 credit**  
**University Preparation**

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

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

### Computer Studies Cooperative Education Program

Computer Studies courses will be of interest to students considering careers in engineering, computer programming, business, computer design and service, animation, information technology, software applications, system analyst, telecommunications technology and architectural technology.

### ENGLISH - COMPULSORY CREDITS

**ENG 4C      English - College Preparation      1 credit**

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

This course may be available "on-line" as an eLearning course. See your Guidance Counsellor.

*Prerequisite: English, Grade 11, College Preparation*

**ENG 4E      English - Workplace Preparation      1 credit**

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

*Prerequisite: English, Grade 11, Workplace Preparation*

**ENG 4U      English - University Preparation      1 credit**

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 analyse 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.

This course may be available "on-line" as an eLearning course. See your Guidance Counsellor.

*Prerequisite: English, Grade 11, University Preparation*

### ENGLISH - COMPULSORY CREDITS

**OLC 40**      **Ontario Secondary School**      **1 credit**  
**Literacy Course**

This course is designed to help students acquire and demonstrate the cross-curricular literacy skills that are evaluated by the Ontario Secondary School Literacy Test. 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 literacy portfolio containing a record of their reading experiences and samples of their writing.

Eligibility requirement: Students who have been unsuccessful at least once on the Ontario Secondary School Literacy Test are eligible to take the course.

### ENGLISH - OPTIONAL CREDITS

**EBT 40**      **Communication in the World of**      **1 credit**  
**Business and Technology - Open**

This course emphasizes practical writing and communication skills that are needed in the world of business and technology. Students will analyse the characteristics of effective models of business and technical communications; gather information to write reports, business letters, memos, manuals, instructions, and brochures; and integrate graphics and text, using technology appropriately for formatting and special effects. They will also make a number of oral and visual presentations.

*Prerequisite: English, Grade 11, University Preparation, College Preparation, or Workplace Preparation*

**ETS 4C**      **Studies in Literature -**      **1 credit**  
**College Preparation**

This course is for students with a special interest in literature. The course may focus on themes, genres, time periods, or countries. Students will study a variety of forms and stylistic elements of literary texts and respond personally, critically, and creatively to them. They will also investigate critical interpretations and complete an independent study project.

*Prerequisite: English, Grade 11, College Preparation*

### ENGLISH - OPTIONAL CREDITS

**ETS 4U**      **Studies in Literature -**      **1 credit**  
**University Preparation**

This course is for students with a special interest in literature and literary criticism. The course may focus on themes, genres, time periods, or countries. Students will analyse a range of forms and stylistic elements of literary texts and respond personally, critically, and creatively to them. They will also assess critical interpretations, write analytical essays, and complete an independent study project.

*Prerequisite: English, Grade 11, University Preparation*

**EWC 4C**      **The Writer's Craft -**      **1 credit**  
**College Preparation**

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

*Prerequisite: English, Grade 11, College Preparation*

**EWC 4U**      **The Writer's Craft -**      **1 credit**  
**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.

*Prerequisite: English, Grade 11, University Preparation*



### ENGLISH AS A SECOND LANGUAGE

The following descriptions apply to English as a Second Language courses offered to students in both OSS and OSIS diploma programs.

**ESL AO      Beginning Communication      1 credit**  
**in English, ESL Level 1 - Open**

This course builds on students' previous education and language knowledge to introduce the English language and help adjust to the diversity in their new environment. Students will use beginning English language skills in listening, speaking, reading, and writing for everyday and essential academic purposes. They will engage in short conversations using basic English language structures and simple sentence patterns; read short adapted texts; and write phrases and short sentences. The course also provides students with the knowledge and skills they need to begin to adapt to their new lives in Canada.

**ESL BO      English in Daily Life,      1 credit**  
**ESL Level 2 - Open**

This course expands students' listening, speaking, reading, and writing skills in English for everyday and academic purposes. Students will participate in conversations, in structured situations on a variety of familiar and new topics; read a variety of texts designed or adapted for English language learners; expand their knowledge of English grammatical structures and sentence patterns; and link English sentences to compose paragraphs. The course also supports students' continuing adaptation to the Ontario school system by expanding their knowledge of diversity in their new province and country.

*Prerequisite: English as a Second Language, Level 1, or equivalent*

**ESL CO      English for School and Work,      1 credit**  
**ESL Level 3 - Open**

This course extends students' skills in listening, speaking, reading, and writing in English for a variety of everyday and academic purposes. Students will make short classroom oral presentations; read a variety of adapted and original texts in English; and write using a variety of text forms. As well, students will expand their academic vocabulary and their study skills to facilitate to the mainstream school program. This course also introduces students to the rights and responsibilities inherent in Canadian citizenship, and to a variety of current Canadian issues.

*Prerequisite: English as a Second Language, Level 2, or equivalent*

### ENGLISH AS A SECOND LANGUAGE

**ESL DO      Study Skills in English,      1 credit**  
**ESL Level 4 - Open**

This course prepares students to use English with increasing fluency and accuracy in classroom and social situations and to participate in Canadian society as informed citizens. Students will develop the oral presentation, reading, and writing skills required for success in all school subjects. They will extend listening and speaking skills through participation in discussions and seminars; study and interpret a variety of grade-level texts; write narratives, articles, and summaries in English; and respond critically to a variety of print and media texts.

*Prerequisite: English as a Second Language, Level 3, or equivalent*

**ESL EO      Bridge to English,      1 credit**  
**ESL Level 5 - Open**

This course provides students with the skills and strategies they need to make the transition to college and university preparation courses in English and other secondary school disciplines. Students will be encouraged to develop independence in a range of academic tasks. They will participate in debates and lead classroom workshops; read and interpret literary works and academic texts; write essays, narratives, and reports; and apply a range of learning strategies and research skills effectively. Students will further develop their ability to respond critically to print and media texts.

*Prerequisite: English as a Second Language, Level 4, or equivalent*

### English Cooperative Education Program

English courses along with the optional English courses will be of interest to students considering careers in journalism, research, teaching, library, publishing, theatre communications, radio and television broadcasting.

### ENGLISH LITERACY DEVELOPMENT

**ELD AO English Literacy Development, 1 credit**  
**Level 1 - Open**

This course is intended for English language learners who have had limited access to schooling and thus have significant gaps in their first-language literacy skills. Students will use basic listening and speaking skills to communicate in English for everyday purposes; develop readiness skills for reading and writing; begin to read highly structured texts for everyday and school-related purposes; and use basic English language structures and sentence patterns in speaking and writing. The course will also help students become familiar with school routines and begin to adapt to their new lives in Canada.

**ELD BO English Literacy Development, 1 credit**  
**Level 2 - Open**

This course is intended for English language learners who have had limited access to schooling and thus have gaps in their first-language literacy skills. Students will use their developing listening and speaking skills to communicate in English for a variety of purposes; develop reading strategies to understand a variety of simple texts; produce simple forms of writing; apply increasing knowledge of English grammatical structures in speaking and writing; expand their vocabulary; and develop fundamental study skills. The course will also provide opportunities for students to become familiar with and use school community resources and to build their knowledge of Canada and diversity.

*Prerequisite: English Literacy Development, Level 1, or equivalent*

**ELD CO English Literacy Development, 1 credit**  
**Level 3 - Open**

This course builds on students' growing literacy and language skills and extends their ability to communicate in English about familiar and school-related topics. Students will make brief oral presentations; improve their literacy skills through a variety of contextualized and supported reading and writing tasks; distinguish between fact and opinion in short written and oral texts; complete short guided-research projects; make brief oral presentations; and engage in a variety of cooperative learning activities. The course will also enable students to strengthen and extend their study skills and personal-management strategies and to broaden their understanding of Canadian diversity and citizenship.

*Prerequisite: English Literacy Development, Level 2, or equivalent*

### ENGLISH LITERACY DEVELOPMENT

**ELD DO English Literacy Development, 1 credit**  
**Level 4 - Open**

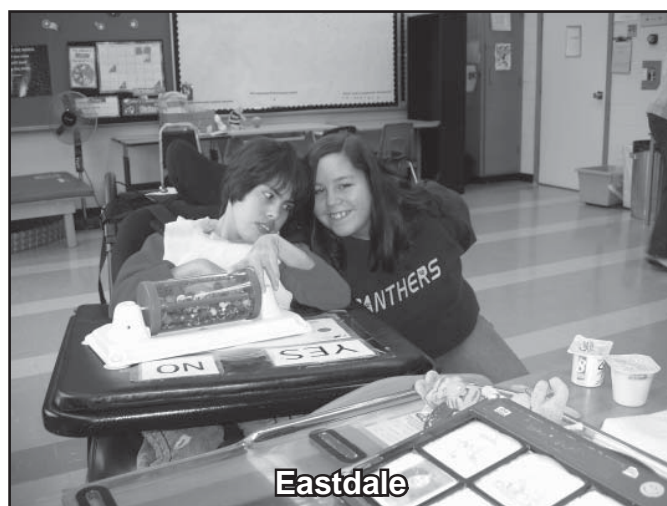
This course extends students' literacy skills and ability to apply learning strategies effectively, and teaches them how to use community resources to enhance lifelong learning. Students will communicate with increased accuracy and fluency for a variety of academic and everyday purposes; perform a variety of guided reading, writing, and viewing tasks; use media and community resources to complete guided-research projects. This course further develops the critical thinking skills students will need to participate in Canadian society as informed citizens.

*Prerequisite: English Literacy Development, Level 3, or equivalent*

**ELD EO English Literacy Development, 1 credit**  
**Level 5 - Open**

This course provides students with skills and strategies that will allow them to continue their education successfully and pursue pathways to employment that may involve apprenticeship and/or cooperative education programs. Students will communicate orally and in writing on a variety of topics; perform a variety of independent reading and writing tasks; interpret and create media texts; use a range of media and community resources. This course also expands the critical thinking skills students will need in order to contribute to Canadian society as informed citizens.

*Prerequisite: English Literacy Development, Level 4, or equivalent*



Eastdale



### FRENCH AS A SECOND LANGUAGE

**FEF 4U**                      **Extended French -**                      **1 credit**  
**University Preparation**

This course emphasizes the refinement of French-language skills through the study of Canadian and international francophone literature. Students will interpret literary works, produce written assignments in a variety of genres, and conduct research on a major topic for a written and oral presentation. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

*Prerequisite: Grade 11 Extended French*

For more information regarding the Extended French program see page 15.

**FSF 4U**                      **Core French -**                      **1 credit**  
**University Preparation**

This course draws on a variety of themes to promote extensive development of French-language skills. Students will consolidate their oral skills as they discuss literature, culture, and current issues. They will read a variety of texts and will write a formal essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.

*Prerequisite: Grade 11 Core French, University*

### French Cooperative Education Program

French as a Second Language can be used in the Cooperative Education Program for students considering careers in teaching, international business, travel & tourism and politics.



Port Colborne

### GUIDANCE AND CAREER EDUCATION

**GLE 40\***                      **Advanced Learning Strategies:**                      **1 credit**  
**Skills for Success After Secondary**  
**School - Open**

This course improves students' learning and personal management skills, preparing them to make successful transitions to work, training, and/or postsecondary education destinations. Students will assess their learning abilities and use literacy, numeracy, and research skills and personal management techniques to maximize their learning. Students will investigate trends and resources to support their postsecondary employment, training, and/or education choices and develop a plan to help them meet their learning and career goals.

\* This version of the Learning Strategies course (GLE 40) is only available to students who have an IEP, with Principal recommendation only.

**GLN 40**                      **Navigating the Workplace -**                      **1 credit**  
**Open**

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

### Guidance and Career Education Cooperative Education Program

Guidance and Career Education can be used in the Cooperative Education Program for students considering a career in any area.



Stamford Collegiate

### HEALTH AND PHYSICAL EDUCATION

**PPL 40      Healthy Active Living - Education - Open      1 credit**

This course focuses on the development of a personalized approach to healthy active living through participation in a variety of sports and recreational activities that have the potential to engage students' interests throughout their lives. Students will develop and implement personal physical fitness plans. In addition, they will be given opportunities to refine their decision-making, conflict-resolution, and interpersonal skills, with a view to enhancing their mental health and their relationships with others.

**Area of Focus:**

The learning expectations of Healthy Active Living Education (PPL 40) course outline the knowledge, skills and health areas that students are expected to demonstrate by the end of each course. Schools may offer focus-courses options for a particular group of physical activities as the vehicle through which students will attain the expectations. Possible focus options are listed below. **Students may select any number of Focus Options at the same grade level each year.**

**PAF 40      Personal and Fitness Activities      1 credit**

This course emphasizes regular participation in a variety of enjoyable fitness activities that promote life-long healthy active living. Student learning will include the application of movement principles to refine their skills, participation in a variety of fitness activities (e.g. aerobics, fitness training, self-defense etc.) that enhance personal competence and health, and examination of issues related to healthy living. Reference should be made to the Healthy Active Living Education open course description for Grade 12 health curriculum expectations.

**PAI 40      Individual and Small Group      1 credit**

This course emphasizes regular participation in a variety of enjoyable individual and small group activities that promote life-long healthy active living. Student learning will include the application of movement principles to refine individual and small group skills (e.g. racquet sports, cross country skiing, orienteering, etc), participation in a variety of activities that enhance personal competence, fitness and health and the examination of issues related to healthy living. Reference should be made to the course description for Grade 12 for health areas of study.

### HEALTH AND PHYSICAL EDUCATION

**PAQ 40      Aquatics      1 credit**

This course emphasizes regular participation in a variety of enjoyable aquatics activities that promote life-long healthy active living. Student teaming will include the application of movement principles to refine aquatics skills (e.g. speed swimming, water polo, life saving awards, CPR), participation in a variety of aquatic activities that enhance personal competence, fitness and health and the examination of issues related to healthy living. Reference should be made to the Healthy Active Living Education open course description for Grade 12 for health areas of study.

**PAD 40      Outdoor Activities      1 credit**

This course emphasizes regular participation in a variety of enjoyable outdoor activities that promote life-long healthy active living. Student learning will include the application of movement principles to refine outdoor skills (e.g. camping, canoeing, hiking etc), participation in a variety of activities that enhance personal competence, fitness and health and the examination of issues related to healthy living. Reference should be made to the Healthy Active Living Education open course descriptions for Grade 12 for health areas of study.

**PSE 4U      Exercise Science - University Preparation      1 credit**

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 sports, and the factors that influence an individual's participation in physical activity. The course prepares students for university programs in physical education, kinesiology, recreation, and sports administration.

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

### HEALTH AND PHYSICAL EDUCATION

#### PLF 4C Recreation and Fitness Leadership - 1 credit College Preparation

This course focuses on the development of leadership and coordination skills related to recreational activities. Students will acquire the knowledge and skills required to plan, organize, and implement recreational events. They will also learn how to promote the value of physical fitness, personal well-being, and personal safety to others through mentoring. The course will prepare students for college programs in recreational, leisure, and fitness leadership.

*Prerequisite: Any Grade 11 or 12 open course in Health and Physical Education*

#### Health and Physical Education Cooperative Education Program

Health and Physical Education courses will be of interest to students considering careers in education, personal fitness training, sports management, kinesiology, nursing, physiotherapy, teaching, social work and recreation therapy.

### INTERDISCIPLINARY STUDIES

#### IDC 4U Partners in Literacy Studies - 1 credit University Preparation

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

### INTERDISCIPLINARY STUDIES

#### IDC 4O Sports & Entertainment Marketing - 1 credit Open

This course emphasizes the development of practical skills and knowledge to solve problems, make decisions, create personal meaning and present findings to the growing Sports and Entertainment Marketing industry. Students will develop skills in the areas of ethics, consumer research, advertising, public relations/publicity, event marketing, endorsement, sponsorship, product distribution, and career opportunities in Sports and Entertainment Marketing. Students will apply the principles and skills derived from the study of Physical Education, Media Studies, Business Marketing and the Social Sciences.

#### IDU 4US Health and Leadership 1 credit Through Sport - University Preparation

This course combines the expectations for Interdisciplinary Studies, Grade 12 University Preparation with selected expectations from two or more courses.(e.g., Exercise Science, Grade 12, University Preparation; Mathematics of Data Management, Grade 12, University Preparation; Recreation and Fitness Leadership, Grade 12, College Preparation).

This course develops information-based knowledge and skills that prepare students for leadership in society. Students will focus on the use of technological resources and applications to plan, implement, communicate, and assess appropriate activities and programs in the local community, such as recreational and fitness events, health exhibitions and promotion. They will also explore the importance of personal fitness and healthy living, the relationship between amateur and professional sports, and local and provincial opportunities and careers in sports, outdoor education, and physical activity.

### MATHEMATICS

#### MAP 4C Foundations for College Mathematics - College Preparation 1 credit

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.

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

### MATHEMATICS

**MHF 4U      Advanced Functions -      1 credit**  
**University Preparation**

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

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

**MCT 4C      Mathematics for College      1 credit**  
**Technology - College Preparation**

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

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

**MDM 4U      Mathematics of Data Management -      1 credit**  
**University Preparation**

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

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

### MATHEMATICS

**MEL 4E      Mathematics for Work and      1 credit**  
**Everyday Life - Workplace Preparation**

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

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

**MCV 4U      Calculus and Vectors -      1 credit**  
**University Preparation**

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

*Note: If at all possible, Advanced Functions (MHF4U) should be taken prior to Calculus and Vectors (MCV4U). If this is not possible, then the two courses must be taken concurrently.*

### Mathematics Cooperative Education Program

Mathematics courses can be used in the Cooperative Education Program for students considering careers in all areas of business management, accounting, financial planning, teaching and engineering.

### SCIENCE

#### SBI 4U Biology - University Preparation 1 credit

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

*Prerequisite: Grade 11 Biology, University*

#### SCH 4C Chemistry - College Preparation 1 credit

This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment. Students will use a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment.

*Prerequisite: Grade 10 Science, Academic or Applied*

#### SCH 4U Chemistry - University Preparation 1 credit

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

*Prerequisite: Grade 11 Chemistry, University*

### Science Cooperative Education Program

Science courses will be of interest to students considering careers in such areas as human and veterinary medicine, chemistry, biology, massage therapy, pharmacy, engineering and other related fields.

### SCIENCE

#### SES 4U Earth and Space Science - University Preparation 1 credit

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 analyse 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.

*Prerequisite: Grade 10 Science, Academic*

This course may be available "on-line" as an eLearning course. See your Guidance Counsellor.

#### SNC 4E Science - Workplace Preparation 1 credit

This course provides students with fundamental science knowledge and workplace skills needed to prepare them for success beyond secondary school. Students will explore hazards in the workplace, chemicals in consumer products, disease and its prevention, electricity at home and at work, and nutritional science. Emphasis is placed on current topics in science and relevant, practical activities that develop students' literacy and mathematical literacy skills and enhance their scientific literacy.

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

#### SNC 4M Science - University/College Preparation 1 credit

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

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

### SCIENCE

#### SPH 4C Physics - College Preparation 1 credit

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

*Prerequisite: Grade 10 Science, Academic or Applied*

#### SPH 4U Physics - University Preparation 1 credit

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

*Prerequisite: Grade 11 Physics, University*



### SOCIAL SCIENCE AND THE HUMANITIES

#### HFA 4M Food and Nutrition Sciences 1 credit University/College Preparation

This course examines various nutritional, psychological, social, cultural, and global factors that influence people's food choices and customs. Students will learn about current Canadian and worldwide issues related to food, frameworks for making appropriate dietary choices, and food-preparation techniques. This course also refines students' skills used in researching and investigating issues related to food and nutrition.

*Prerequisite: Any University, University/College, or College preparation course in Social Sciences and Humanities, English, or Canadian and World Studies*

#### HHG 4M Issues in Human Growth and Development 1 credit University/College Preparation

This course offers a multidisciplinary approach to the study of human development throughout the life cycle, with particular emphasis on enhancing growth and development. Students will examine how early brain and child development are linked to lifelong learning, health, and well-being, and will develop child-care and human-relationship skills through practical experience in a community setting. This course also refines students' skills used in researching and investigating issues related to human growth and development.

*Prerequisite: Any University, University/College, or College preparation course in Social Sciences and Humanities, English, or Canadian and World Studies*

#### HHS 4M Individuals and Families in a Diverse Society - 1 credit University/College Preparation

This course applies current theories and research from the disciplines of anthropology, psychology, and sociology to the study of individual development, family behaviour, intimate and parent-child relationships, and the ways in which families interact within the diverse Canadian society. Students will learn the interpersonal skills required to contribute to the well-being of families, and the investigative skills required to conduct and evaluate research about individuals and families.

*Prerequisite: Any University, University/College, or College preparation course in Social Sciences and Humanities, English, or Canadian and World Studies*

## SOCIAL SCIENCE AND THE HUMANITIES

### HNB 40 The Fashion Industry - Open 1 credit

This course provides a historical perspective on fashion and design, exploring the origins, influence, and importance of fashion as an expression of national, cultural, religious, and personal identity. Students will learn about the many facets of the Canadian fashion industry, including both large-scale and small entrepreneurial enterprises, and its worldwide links, as well as gaining practical experience in garment design, production, and care. This course also refines students' skills used in researching and investigating various aspects of the fashion industry.

### HPD 4E Parenting and Human Development - 1 credit Workplace Preparation

This course prepares students for occupations involving older children, and for the responsibility of parenting, with emphasis on school-age and adolescent children. Students will learn, through practical experience in the community, how early child development affects later development, success in school, and personal and social well-being throughout life, and how children and parents change over time. This course also develops students' skills in researching and investigating various aspects of parenting and human development.

### HSB 4M Challenge and Change in Society - 1 credit University/College Preparation

This course examines the theories and methodologies used in anthropology, psychology, and sociology to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour and their impact on society. Students will analyse cultural, social, and biological patterns in human societies, looking at the ways in which those patterns change over time. Students will also explore the ideas of classical and contemporary social theorists, and will apply those ideas to the analysis of contemporary trends.

*Prerequisite: Any University, University/College, or College preparation course in Social Sciences and Humanities, English, or Canadian and World Studies*

## SOCIAL SCIENCE AND THE HUMANITIES

### HZT 4U Philosophy: Questions and Theories - 1 credit University Preparation

This course addresses three (or more) of the main areas of philosophy: metaphysics, logic, epistemology, ethics, social and political philosophy, and aesthetics. Students will learn critical-thinking skills, the main ideas expressed by philosophers from a variety of the world's traditions, how to develop and explain their own philosophical ideas, and how to apply those ideas to contemporary social issues and personal experiences. The course will also help students refine skills used in researching and investigating topics in philosophy.

*Prerequisite: Any University, University/College, or College preparation course in Social Sciences and Humanities, English, or Canadian and World Studies*

### Social Science Cooperative Education Program

Social Science and Humanities courses will be of interest to students considering careers in teaching, social work, politics, law enforcement, journalism, gerontology and anthropology.



Ridgeway-Crystal Beach

## TECHNOLOGICAL EDUCATION

In broad-based technology, courses in Grades 10, 11 and 12 that lead to apprenticeship or certification programs, or that are part of school-work transition programs, may be planned for up to 330 hours of scheduled instructional time. This additional instructional time allows for the practice and refinement of skills needed to raise the quality of students' performance to the levels required for certification, entry into apprenticeship programs, or participation in school-work transition programs. (It may also support articulation agreements for advanced standing or preferred entrance into specialized programs.) Instructional time may be increased by increments of 55 hours; for each additional 55 hours, students earn an additional half-credit. **A maximum of three credits may be earned for the successful completion of a 330-hour course.** The number of additional credits and the nature of the assignments to be completed must be established before the start of the course. **Emphasis courses and their course codes are listed for each broad-based technology.**

### COMMUNICATIONS TECHNOLOGY

**TGJ 4M      Communications Technology -                      1 credit**  
**University/College Preparation**

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

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

#### **Emphasis Courses:**

TGG4M - Print and Graphic Communications  
 TGI4M - Interactive New Media and Animation  
 TGP4M - Photography and Digital Imaging  
 TGV4M - TV, Video and Movie Production  
 TGR4M - Radio, Audio and Sound Production

## TECHNOLOGICAL EDUCATION

**TGJ 4O      Communications Technology:                      1 credit**  
**Digital Imagery and Web Design**  
**- Open**

This course enables students to develop knowledge and skills in the areas of photography, digital imaging, animation, 3D modelling, and web design. Students will work both independently and as part of a production team to design and produce media products in a project-driven environment. Practical projects may include photo galleries, digital images, animations, 3D models, and websites. Students will also expand their awareness of environmental and societal issues related to communications technology and explore postsecondary education, training, and career opportunities.

### COMPUTER TECHNOLOGY

**TEJ 4E      Computer Technology -                                      1 credit**  
**Workplace Preparation**

This course enables students to further develop their practical understanding of computer hardware, software, networks, and operating systems. Students will use utility and application software, and will follow proper procedures for installing, maintaining, and troubleshooting computer systems and networks. In addition to demonstrating an understanding of the ethical use and environmental effects of computers, students will develop marketable skills and assess career opportunities in the field.

*Prerequisite: Grade 11 Computer Technology, Workplace*

#### **Emphasis Courses:**

TET4E - Information Technology Support  
 TEC4E - Computer Repair  
 TEW4E - Network Support





### TECHNOLOGICAL EDUCATION

#### **TEJ 4M Computer Engineering Technology - 1 credit** **University/College Preparation**

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

*Prerequisite: Grade 11 Computer Engineering Technology, University/College*

#### **Emphasis Courses:**

TEL4M - Electronics  
TER4M - Robotics and Control Systems  
TEN4M - Networking  
TEI4M - Interfacing

### CONSTRUCTION TECHNOLOGY

#### **TCJ 4C Construction Engineering Technology - 1 credit** **College Preparation**

This course enables students to further develop knowledge and skills related to residential construction and to explore light commercial construction. Students will gain hands on experience using a variety of materials, processes, tools, and equipment and will learn more about building design and project planning. They will continue to create and interpret construction drawings and will extend their knowledge of construction terminology and of relevant building codes and regulations, as well as health and safety standards and practices. Students will also focus on environmental and societal issues related to construction engineering technology, and explore career opportunities in the field.

*Prerequisite: Grade 11 Construction Engineering Technology, College*

#### **Emphasis Courses:**

TCS4C - Construction, Management and Science  
TCY4C - Civil Engineering

### TECHNOLOGICAL EDUCATION

#### **TCJ 4E Construction Technology - 1 credit** **Workplace Preparation**

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

*Prerequisite: Grade 11 Construction Technology, Workplace*

#### **Emphasis Courses:**

TCP4E - Plumbing  
TCE4E - Electrical/Network Cabling  
TCM4E - Masonry  
TCH4E - Heating and Cooling  
TCC4E - Carpentry

#### **TWJ 4E Custom Woodworking - 1 credit** **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.

*Prerequisite: Grade 11 Custom Woodworking, Workplace*

## TECHNOLOGICAL EDUCATION

### GREEN INDUSTRIES

**THJ 4E**                      **Green Industries -**                      **1 credit**  
**Workplace Preparation**

This course enables students to gain further experience with a variety of industry procedures and operations and to acquire additional industry-specific skills. Students will study more complex processes, develop more advanced design and maintenance skills, and explore ways of enhancing environmental sustainability. They will also examine social and economic issues related to the green industries, learn about safe and healthy working practices, study industry standards and codes, and explore career opportunities in the various industries. The knowledge and skills acquired in this course will prepare students for the workplace and apprenticeship training.

*Prerequisite: Green Industries Grade 11, Workplace*

#### **Emphasis Courses:**

THG4E - Agriculture  
THF4E - Floristry  
THH4E - Horticulture  
THL4E - Landscape Construction and Maintenance

### HAIRSTYLING AND AESTHETICS

**TXJ 4E**                      **Hairstyling and Aesthetics -**                      **1 credit**  
**Workplace Preparation**

This course enables students to develop increased proficiency in a wide range of hairstyling and aesthetics services. Working in a salon/spa team environment, students strengthen their fundamental cosmetology skills and develop an understanding of common business practices and strategies in the salon/spa industry. Students expand their understanding of environmental and societal issues and their knowledge of postsecondary destinations in the hairstyling and aesthetics industry.

*Prerequisite: Grade 11 Hairstyling and Aesthetics, Workplace*

#### **Emphasis Courses:**

TXH4E - Hairstyling  
TXA4E - Aesthetics

## TECHNOLOGICAL EDUCATION

### HEALTH CARE

**TPJ 4C**                      **Health Care -**                      **1 credit**  
**College Preparation**

This course focuses on the development of clinical skills needed to assess general health status. Students will learn about accepted health care practices and about how to perform various basic procedures, using appropriate instruments and equipment. They will learn about the human immune system, pathology, and disease prevention and treatment. Students will also expand their awareness of workers' health and safety issues, environmental and societal issues related to health care, and postsecondary destinations in the field.

*Prerequisite: Grade 11 Health Care, College*

**TPJ 4E**                      **Health Care: Support Services -**                      **1 credit**  
**Workplace Preparation**

This course enables students to develop the basic skills needed for careers in a range of health care support services. Students will practise and apply a variety of clinical procedures and infection control skills as they learn about principles of infection control, service excellence, and the nature of the health care industry. Students will also investigate workers' health and safety issues, environmental and societal issues related to health care, and career opportunities in the field.

**TPJ 4M**                      **Health Care -**                      **1 credit**  
**University/College Preparation**

This course focuses on the development of clinical skills needed to assess general health status. Students will learn about accepted health care practices and about how to perform various procedures, using appropriate instruments and equipment. They will learn about the human immune system, pathology, and disease prevention and treatment. Students will also expand their awareness of workers' health and safety issues, environmental and societal issues related to health care, and postsecondary destinations in the field.

*Prerequisite: Grade 11 Health Care, University/College*

## TECHNOLOGICAL EDUCATION

**TOJ 4C**      **Child Development and Gerontology - College Preparation**      **1 credit**

This course enables students to examine the stages of child development and the aging process. Students will study the processes of disease and factors contributing to health and well-being in early and later life, and will develop skills required to meet the needs of children and older adults (care skills). Students will also learn about legislation governing the care of children and older adults; evaluate social and recreational activities, programs, and services for improving quality of life; and develop an awareness of health and safety issues, environmental and social issues, and career opportunities related to child care and gerontology.

## HOSPITALITY AND TOURISM

**TFJ 4C**      **Hospitality and Tourism - College Preparation**      **1 credit**

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.

*Prerequisite: Grade 11 Hospitality and Tourism, College*

### **Emphasis Courses:**

TFR4C - Culinary Arts and Management

TFN4C - Applied Nutrition

TFT4C - Tourism and Travel Planning



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## TECHNOLOGICAL EDUCATION

**TFJ 4E**      **Hospitality and Tourism - Workplace Preparation**      **1 credit**

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.

*Prerequisite: Grade 11 Hospitality and Tourism, Workplace*

### **Emphasis Courses:**

TFB4E - Baking

TFC4E - Cooking

TFE4E - Event Planning

## MANUFACTURING TECHNOLOGY

**TMJ 4C**      **Manufacturing Technology - College Preparation**      **1 credit**

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

*Prerequisite: Grade 11 Manufacturing Technology, College*

### **Emphasis Courses:**

TMC4C - Computer Aided Manufacturing

TMI4C - Industrial Maintenance

TMP4C - Precision Machining

TMT4C - Robotics and Control Technician

TMY4C - Welding Technician

## TECHNOLOGICAL EDUCATION

### **TMJ 4E      Manufacturing Technology -      1 credit** **Workplace Preparation**

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

*Prerequisite: Grade 11 Manufacturing Technology, Workplace*

#### **Emphasis Courses:**

TMO4E - Machine Operator

TMW4E - Welding

### **TMJ 4M      Manufacturing Engineering      1 credit** **Technology - University/College Preparation**

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

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

#### **Emphasis Courses:**

TMM4M – Mechanical Engineering

TMR4M – Robotics and Control Systems

## TECHNOLOGICAL EDUCATION

### TECHNOLOGICAL DESIGN

### **TDJ 4M      Technological Design -      1 credit** **University/College Preparation**

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

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

#### **Emphasis Courses:**

TDP4M - Apparel and Textile Design

TDA4M - Architectural Design

TDR4M - Robotic and Control Systems

TDV4M - Interior Design

TDM4M - Mechanical and Industrial Design

### **TDJ 4O      Technological Design in the      1 credit** **Twenty-first Century - Open**

This course focuses on the relationship between society and technological development. Students will use appropriate tools, techniques, and strategies to research, design, build, and assess prototypes for products and/or processes that respond to society's changing needs. Students will describe how social factors, including culture, media, politics, religion, and environmental concerns, influence technological design. Students will also learn about professional practices in the field, and will research postsecondary pathways leading to careers related to technological design.

### TECHNOLOGICAL EDUCATION

#### TRANSPORTATION TECHNOLOGY

**TTJ 4C      Transportation Technology -      1 credit**  
**College Preparation**

This course enables students to further develop technical knowledge and skills as they study, test, service, and repair engine management systems; power trains; steering/control, suspension, brake, and body systems on vehicles, aircraft, and/or watercraft; and/or small engine products. Students will refine communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will expand their awareness of environmental and societal issues related to transportation and their knowledge of apprenticeship and college programs leading to careers in the transportation industry.

*Prerequisite: Grade 11 Transportation Technology, College*

#### **Emphasis Courses:**

TTB4C - Auto Body

TTA4C - Auto Service

TTS4C - Small Engine and Recreational Equipment

**TTJ 4E      Transportation Technology:      1 credit**  
**Vehicle Maintenance**  
**- 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.

### **Technological Cooperative Education Program**

All technological courses can be used in the Cooperative Education Program for students considering careers in a variety of fields such as electricity, tourism, plumbing, manufacturing and automotive manufacturing.

**OYAP** Students may have the opportunity to begin an apprenticeship while earning these high school credits. For more information see page 9.



**Governor Simcoe**

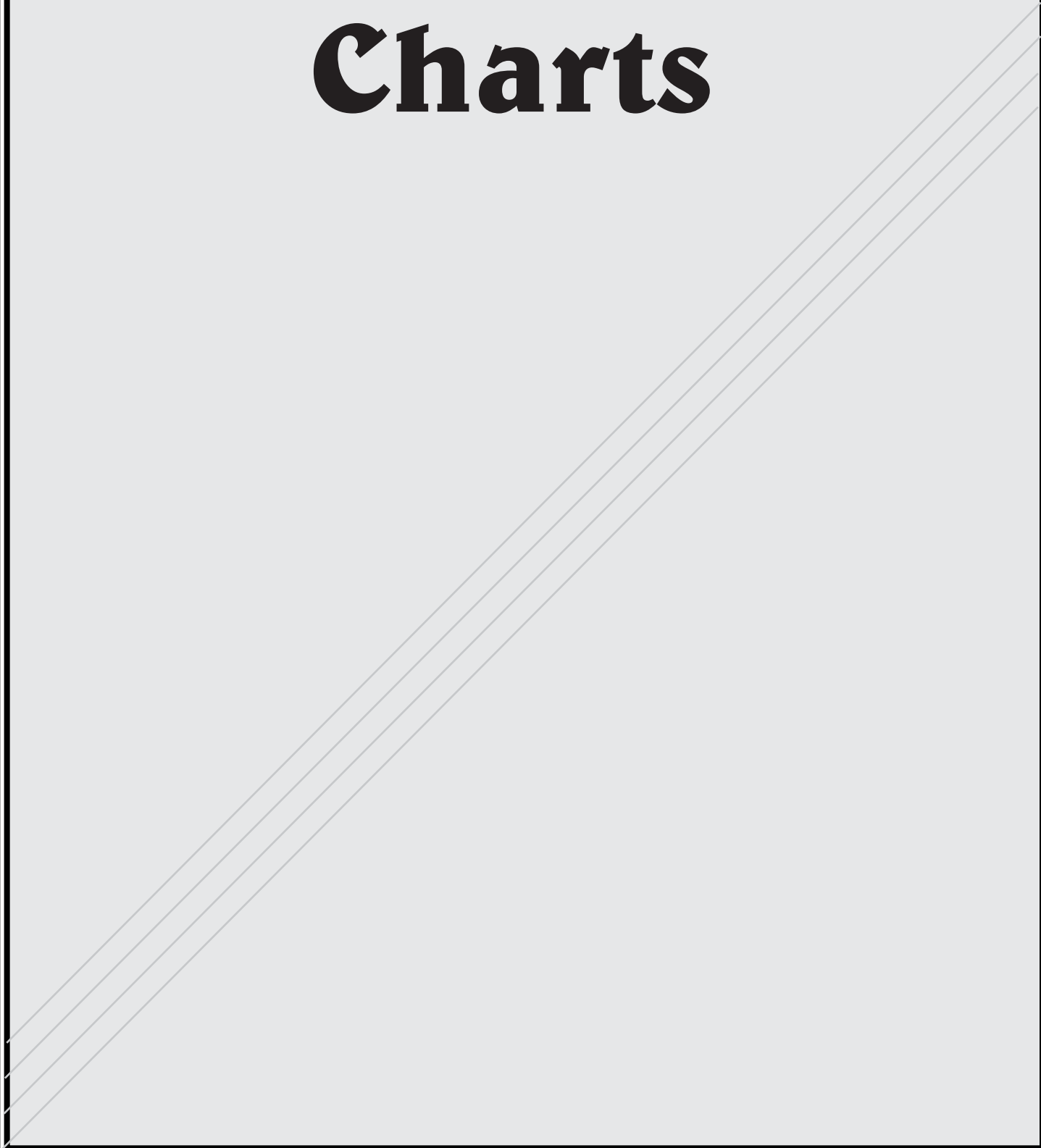


**Thorold**



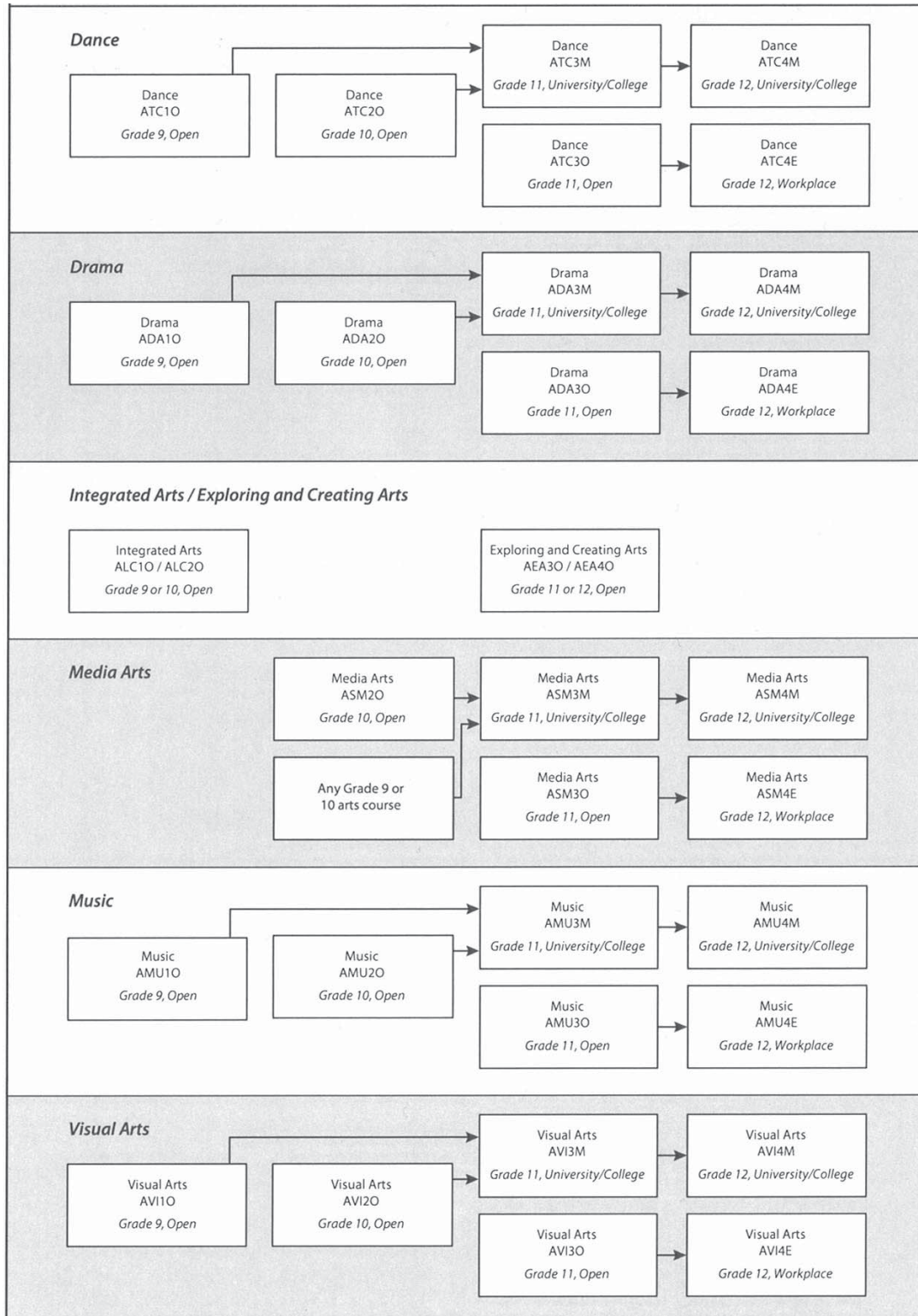
**Grimsby**

# **Prerequisite Charts**

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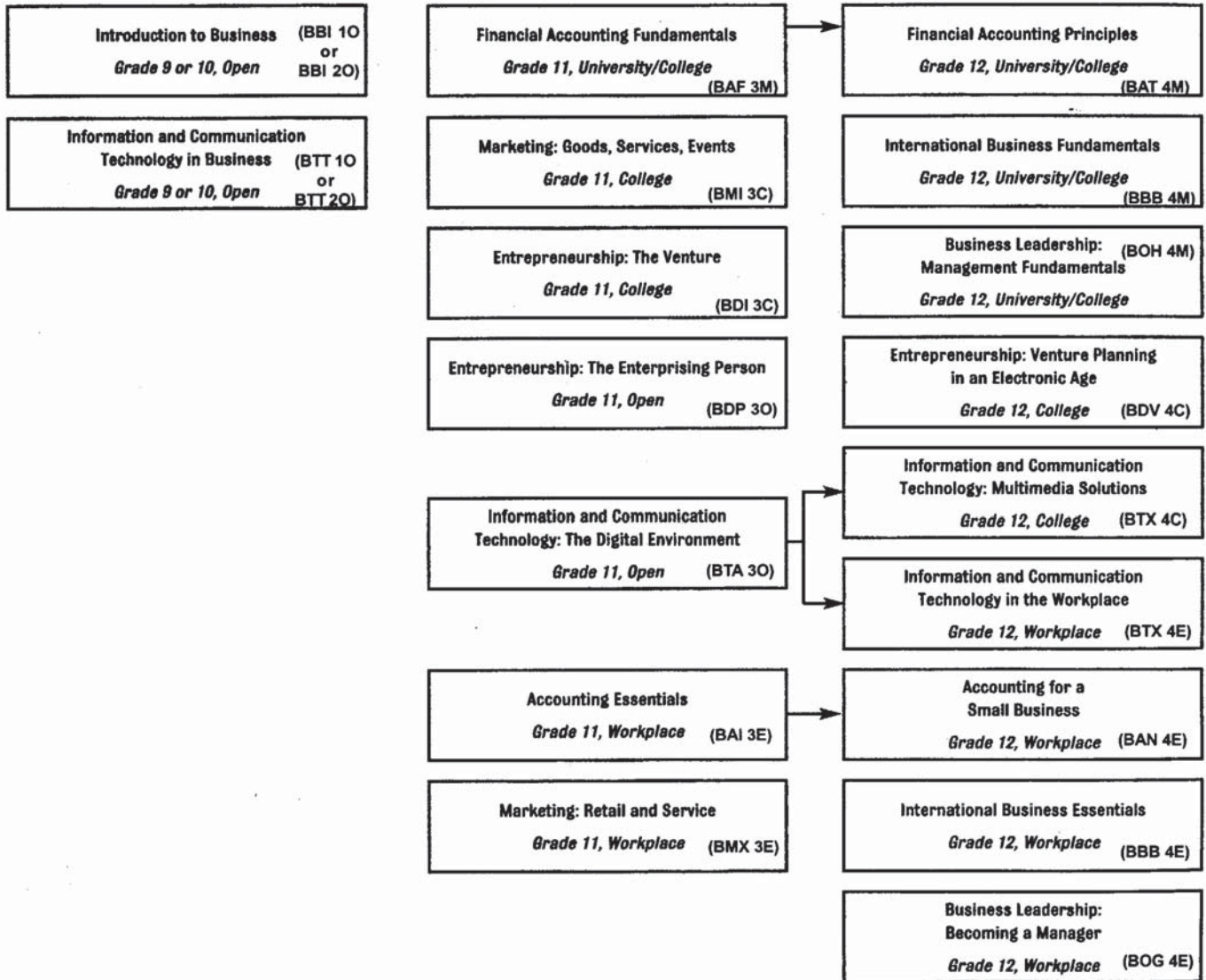
**Prerequisite Chart for the Arts**

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



## Prerequisite Chart for Business Studies

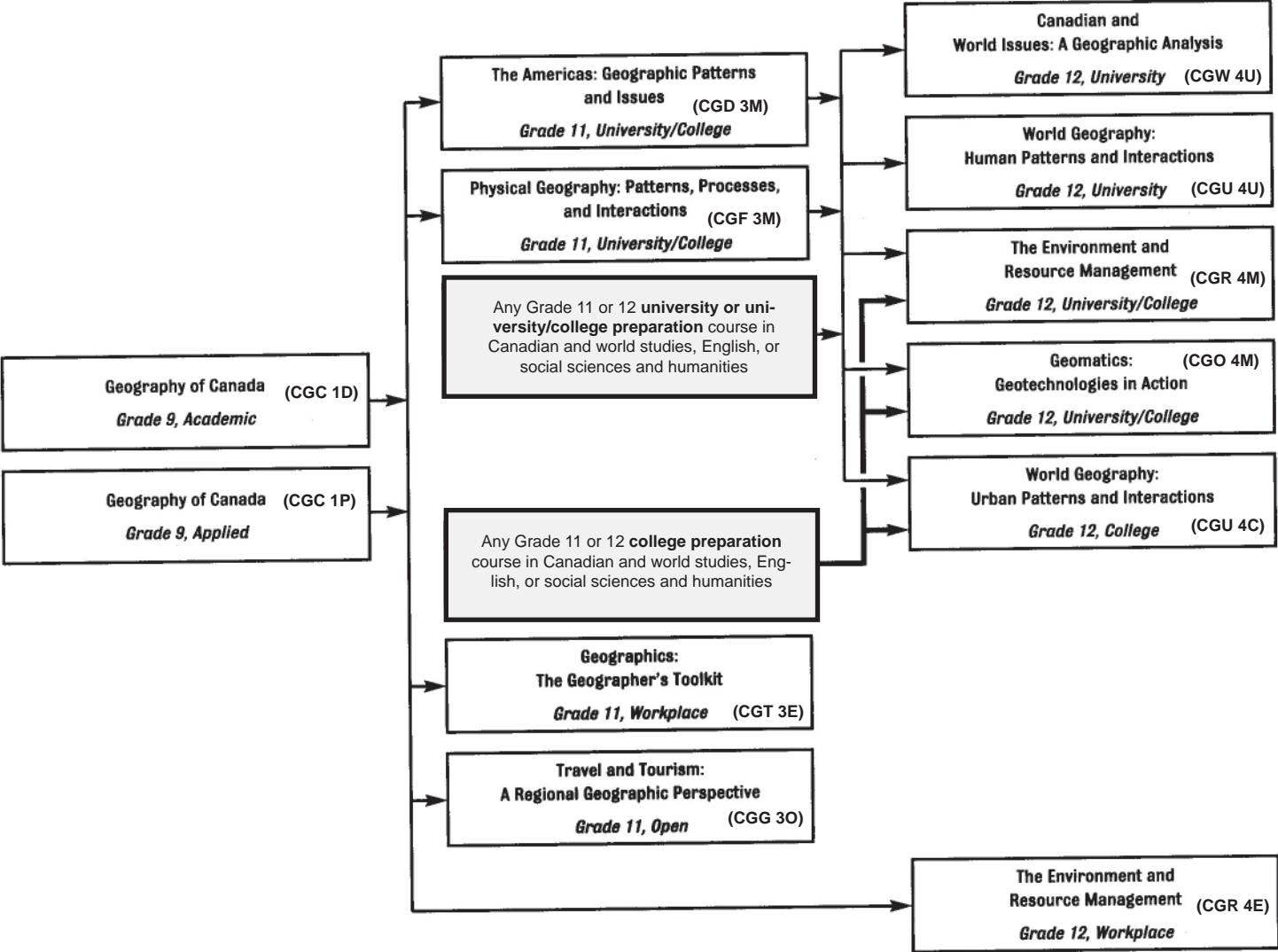
The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.





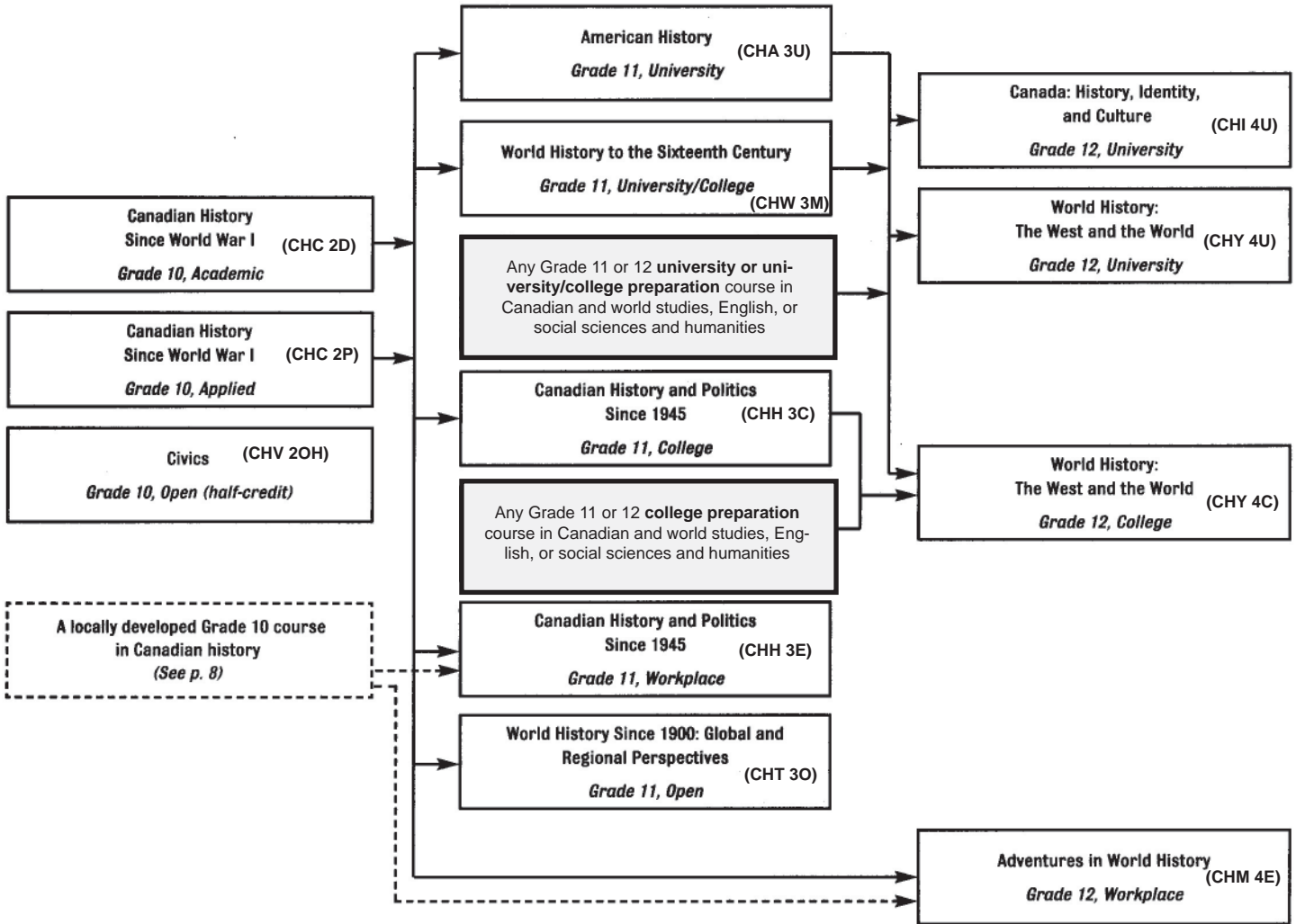
**Prerequisite Chart for Canadian and World Studies - Geography**

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



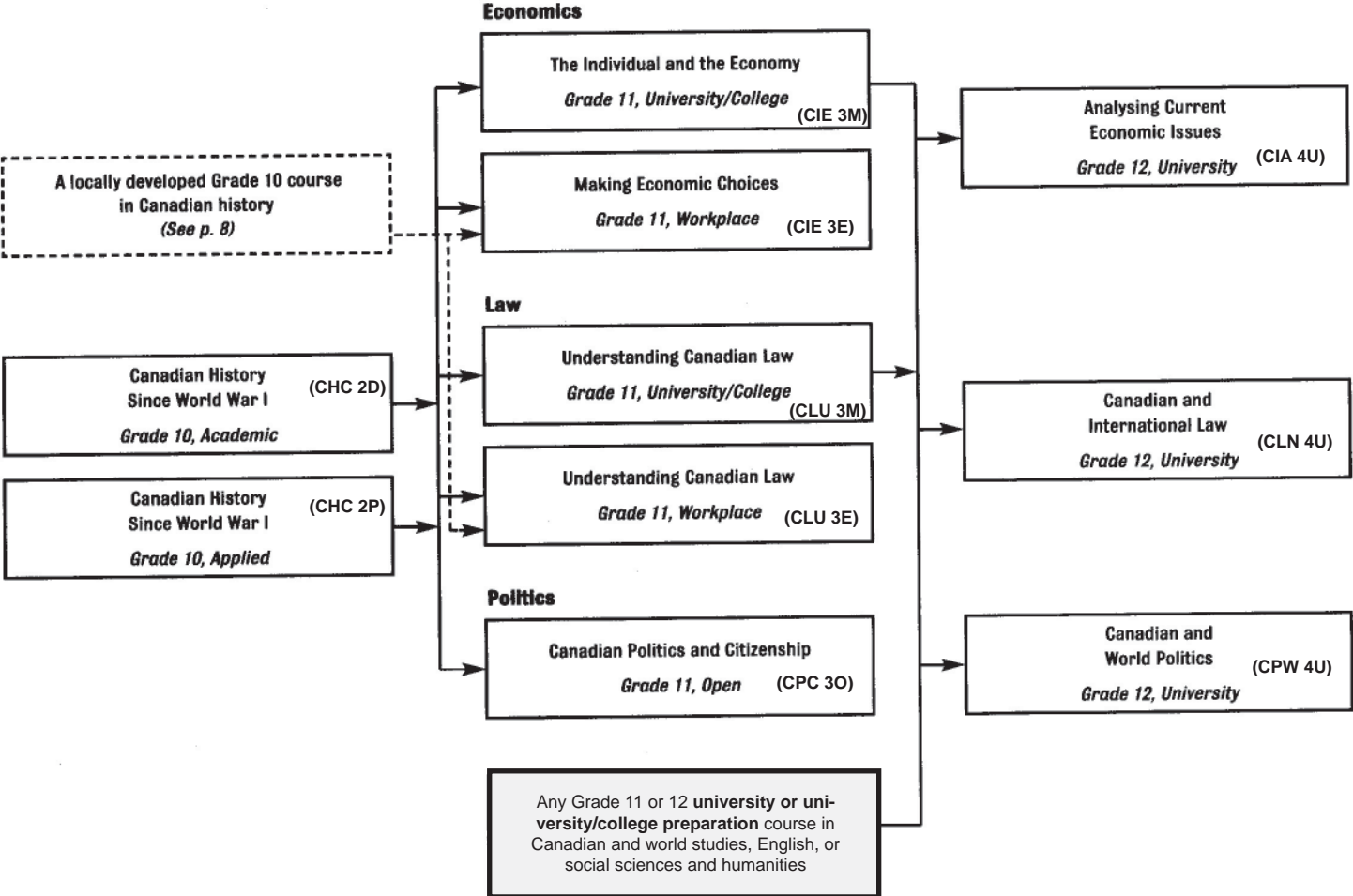
**Prerequisite Chart for Canadian and World Studies - History**

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



**Prerequisite Chart for Canadian and World Studies - Economics, Law, and Politics**

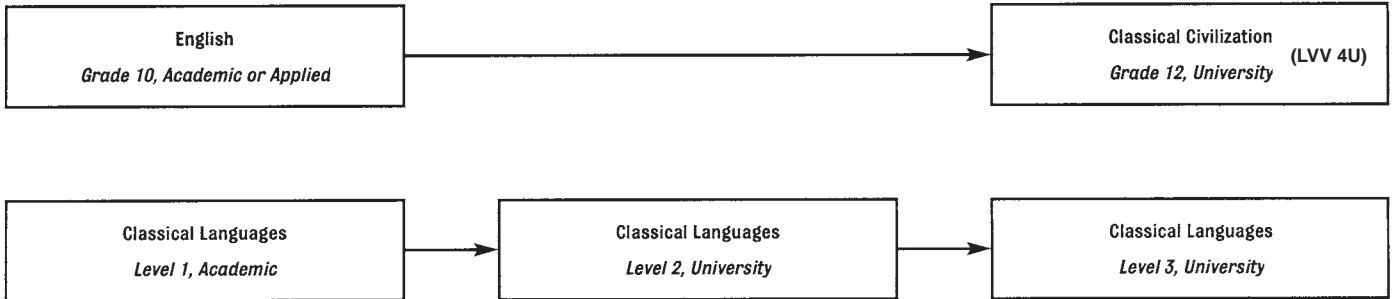
The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



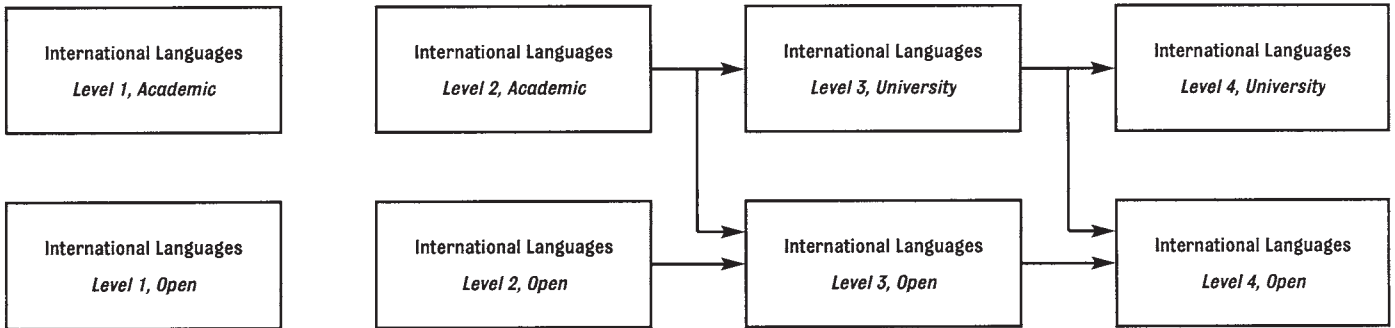
**Prerequisite Chart for Classical Studies and International Languages**

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.

**Classical Studies**



**International Languages**



*Notes*

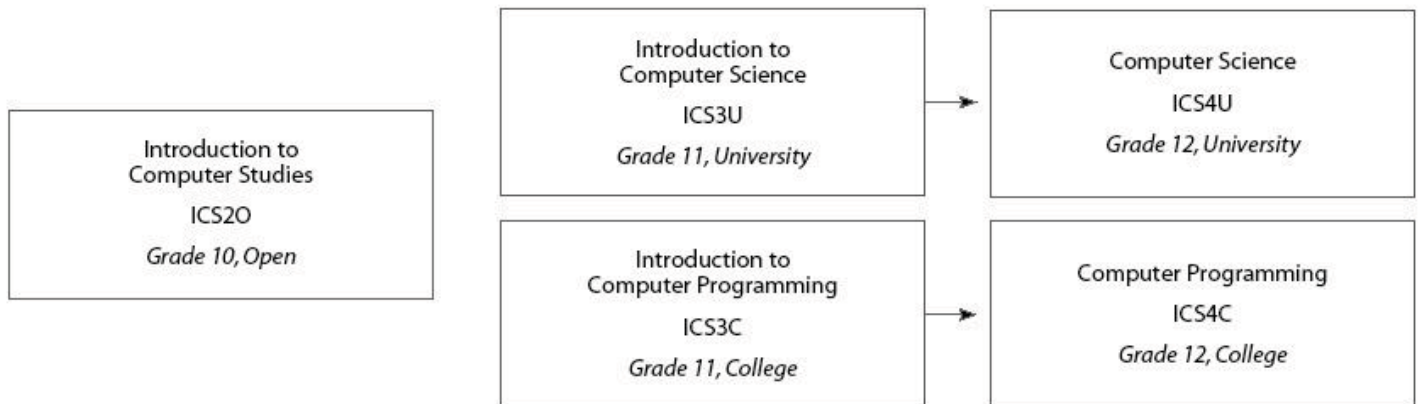
Boards and schools may choose to offer their program in international languages beginning at Level 1 or Level 2.

Codes will be assigned to identify courses for students who have no knowledge of the international language and courses for students who have some knowledge of the language.

Prerequisites for Level 2 International Languages, Academic or Open, will be determined by school boards, depending on the structure of their international language program..

### Prerequisite Chart for Computer Studies

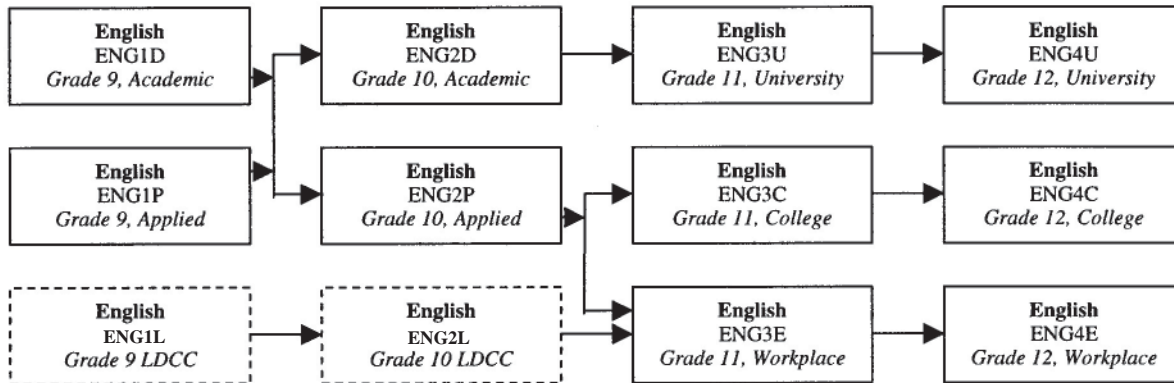
The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



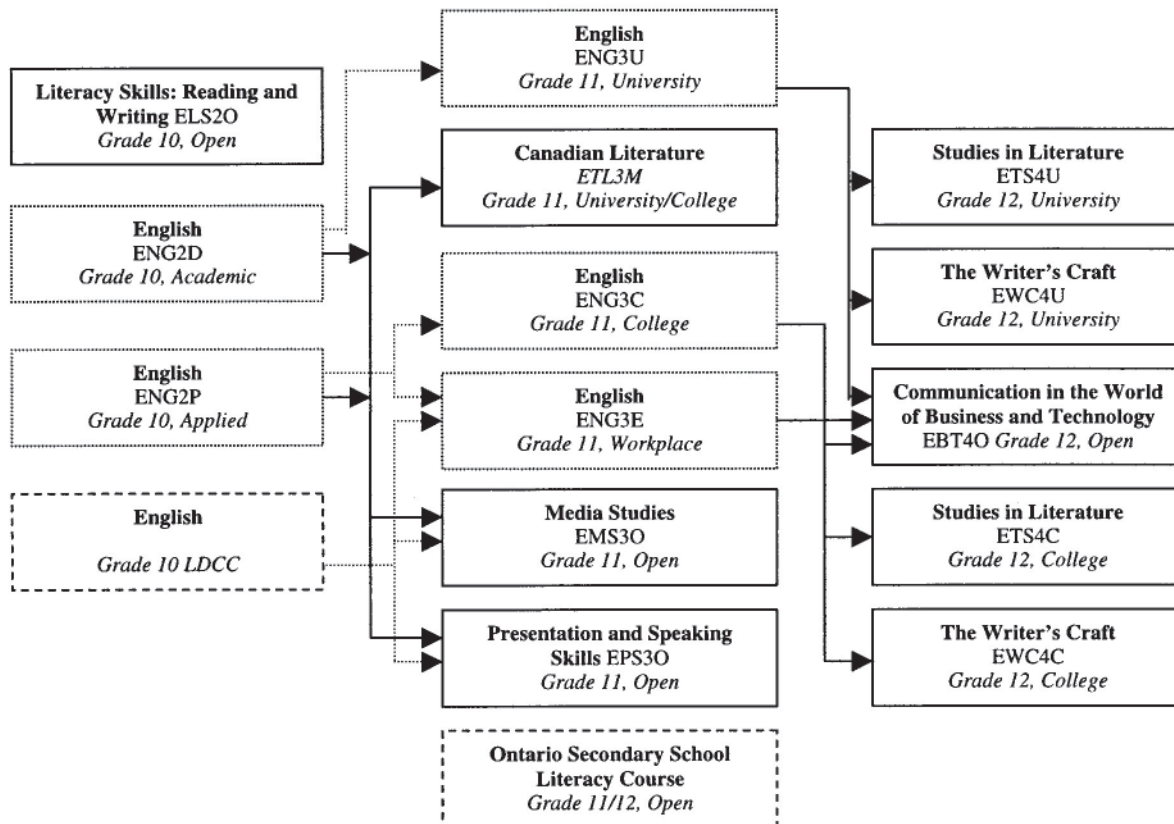
## Prerequisite Chart for English

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.

### Compulsory Courses



### Optional Courses



**Prerequisite Charts for English as a Second Language and English Literacy Development**

The chart below shows how most students may progress through their ESL and/or ELD courses and into mainstream English courses. Not all students will follow this sequence exactly, and individual students may vary in the rate at which they progress through the levels.

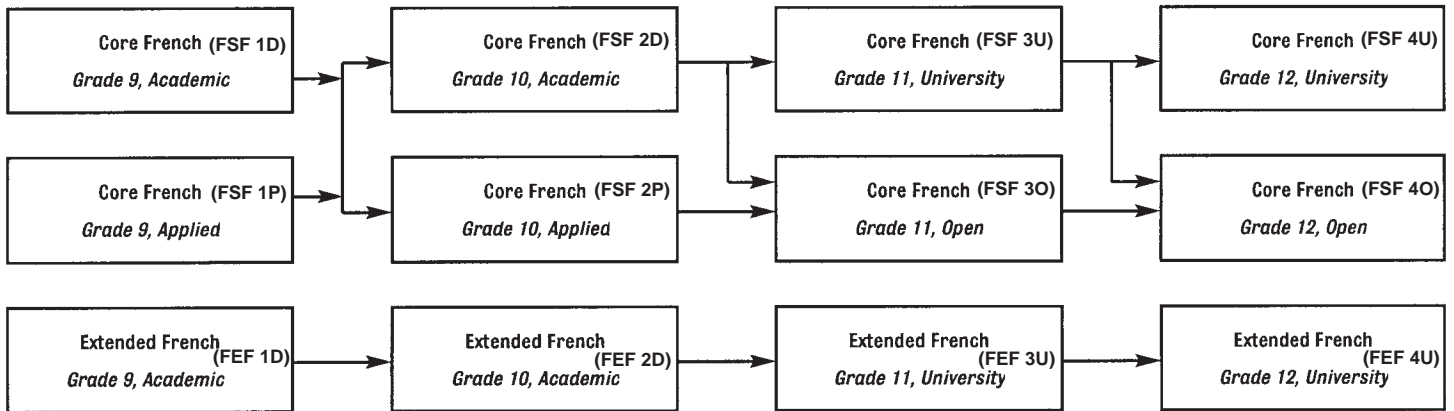
**English as a Second Language**

**English Literacy Development**



## Prerequisite Chart for French As a Second Language (FSL)

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



### Notes

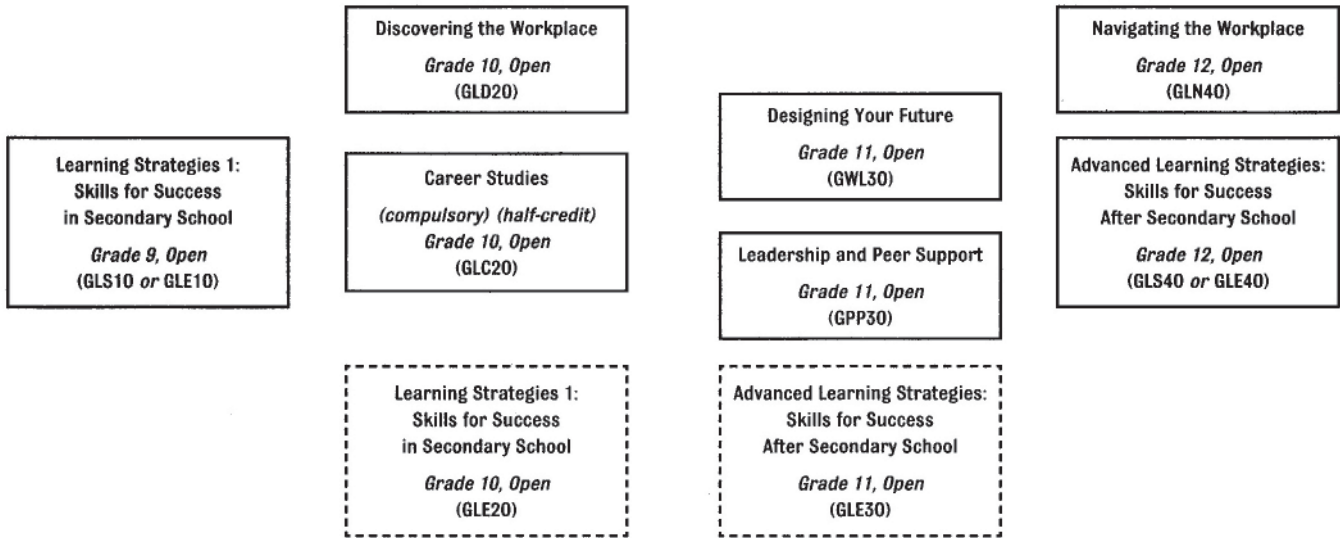
1. The prerequisite for Grade 9 Extended French is the elementary Extended French program or equivalent.

Students who have successfully completed elementary Extended French programs or their equivalent, and do not wish to pursue further studies in these programs should be considered for advanced placement in the Core French program, if they demonstrate the necessary knowledge and skills.



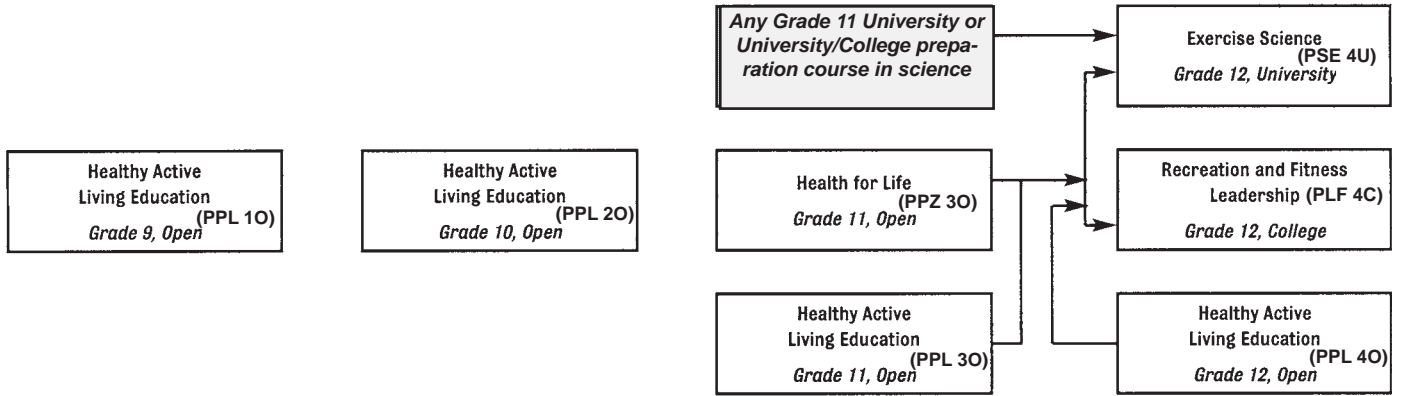
**Prerequisite Chart for Guidance and Career Education**

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



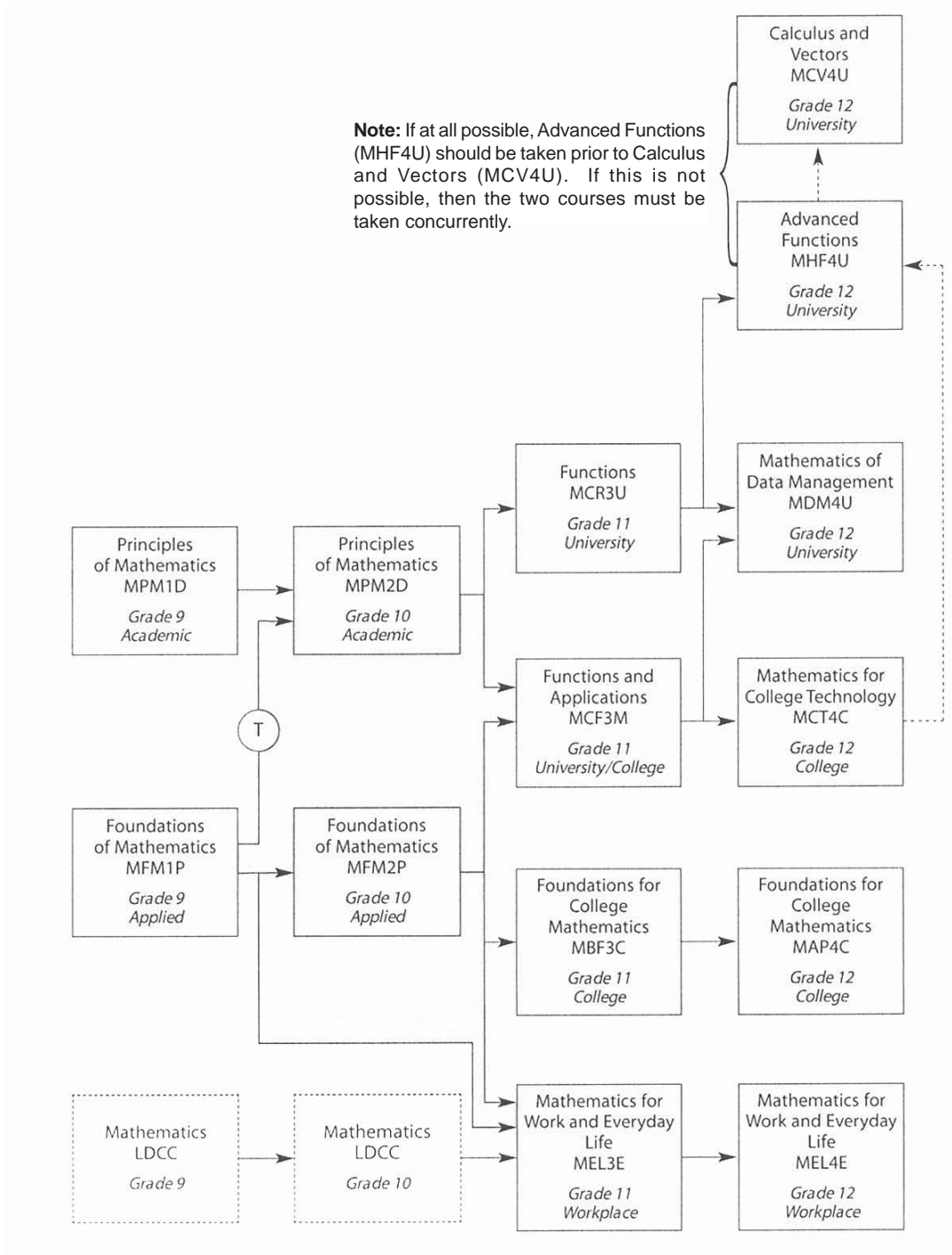
**Prerequisite Chart for Health and Physical Education**

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



## Prerequisite Chart for Mathematics

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



**Notes:**

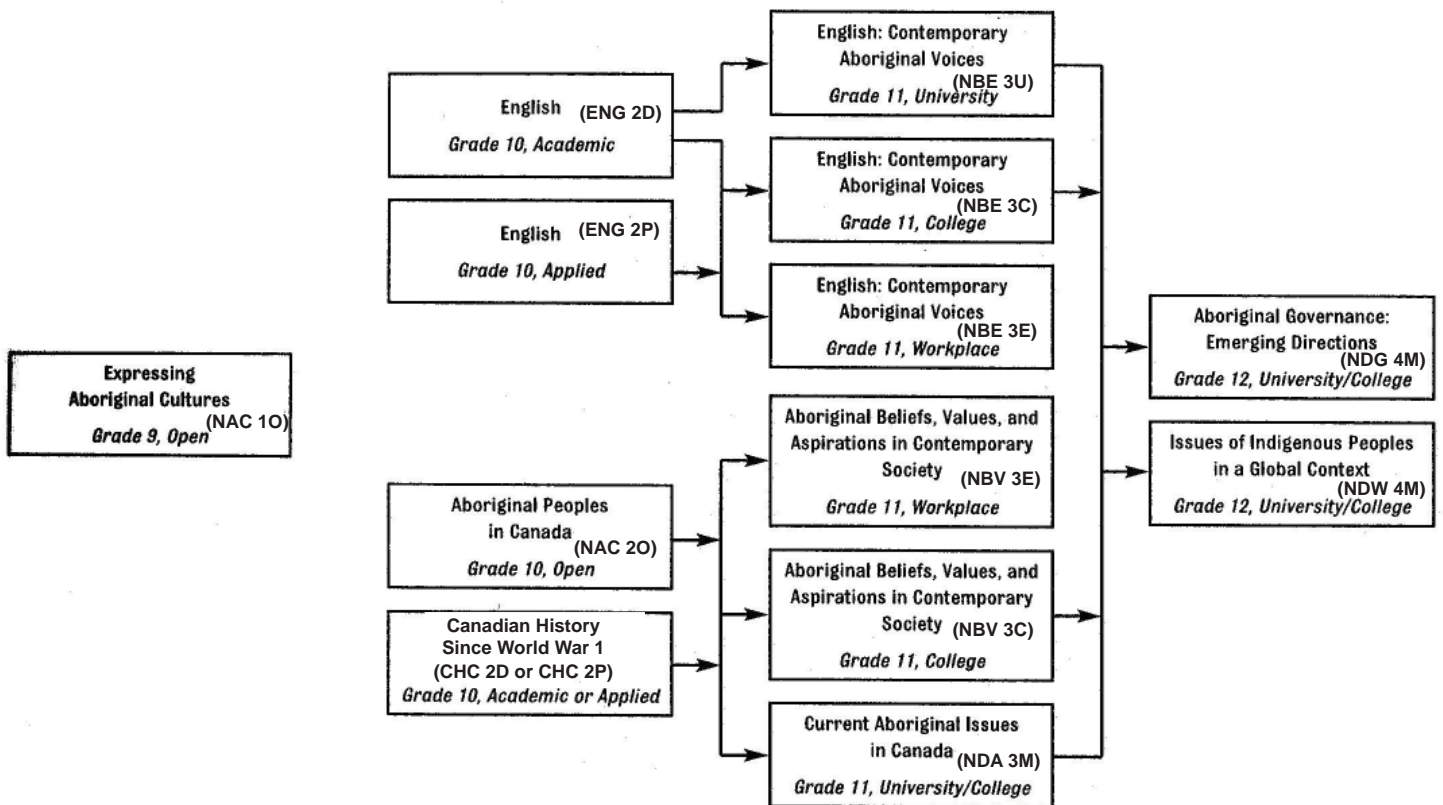
T - transfer course

LDCC - locally developed compulsory credit course (LDCC courses are not outlined up this document.)

**Prerequisite Chart for Native Studies**

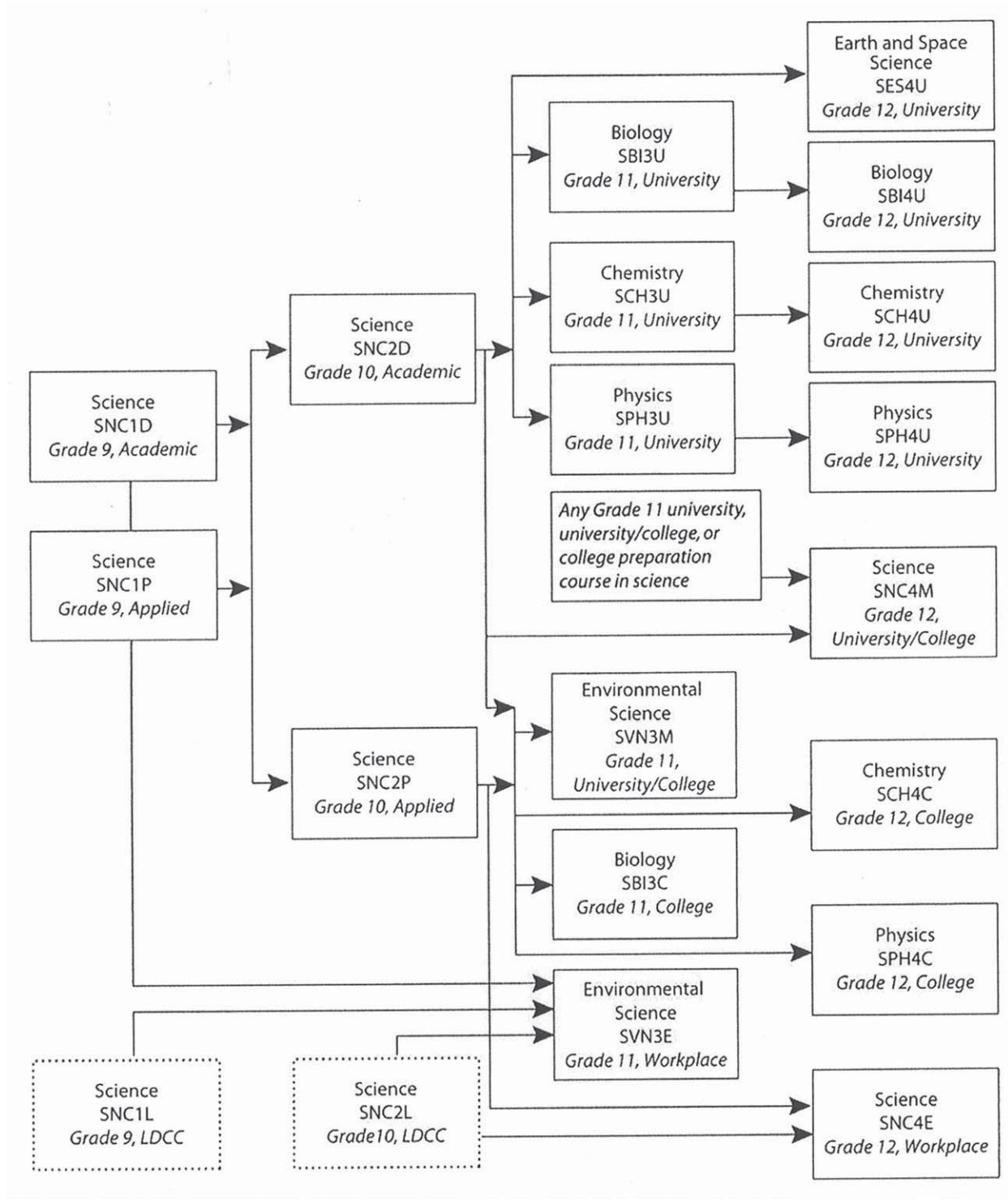
The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.

**Note:** Students who take the Grade 11 course English: Contemporary Aboriginal Voices (university, college or workplace preparation) may use the credit earned for this course to meet the Grade 11 English compulsory credit requirement.



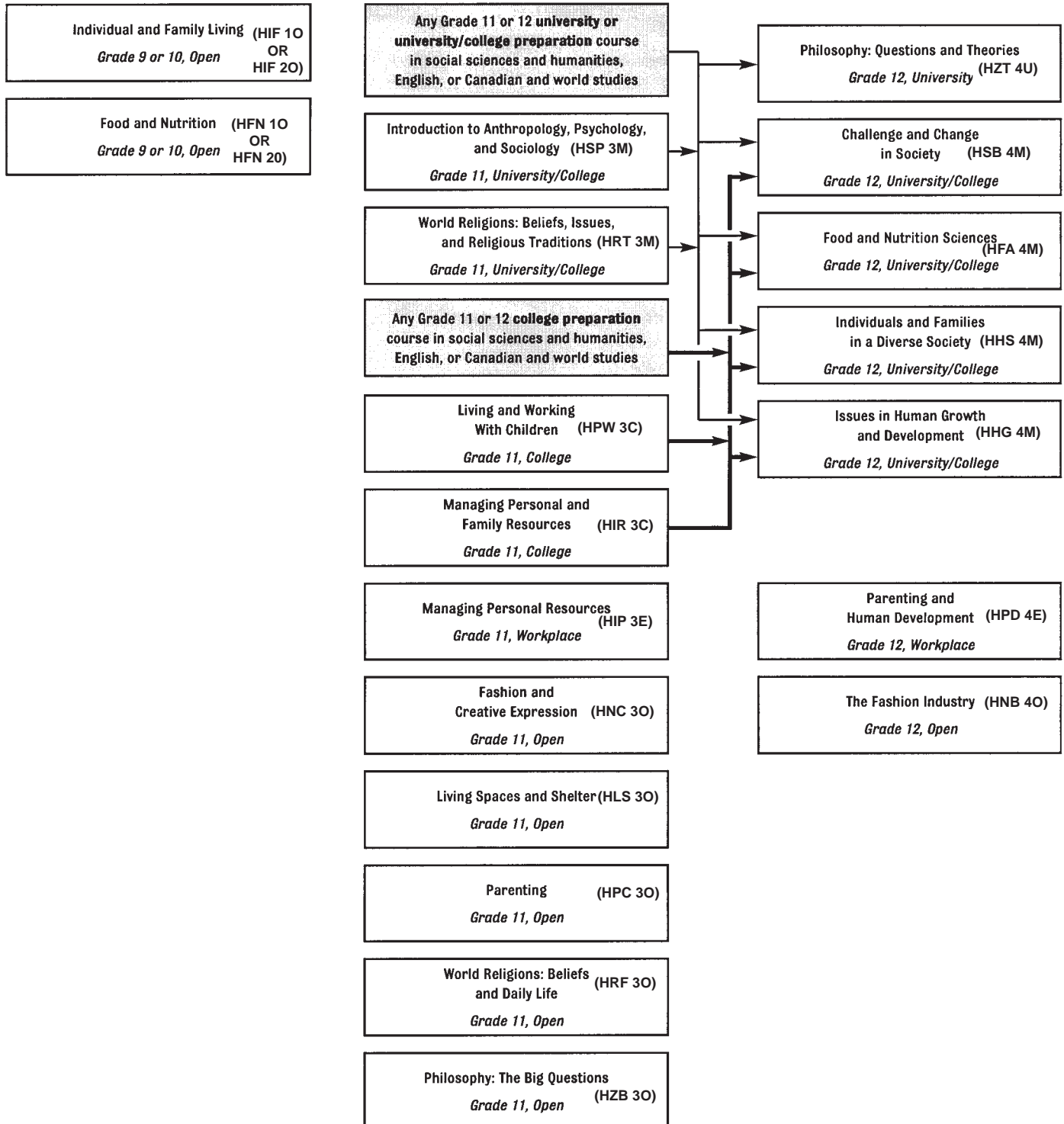
**Prerequisite Chart for Science**

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



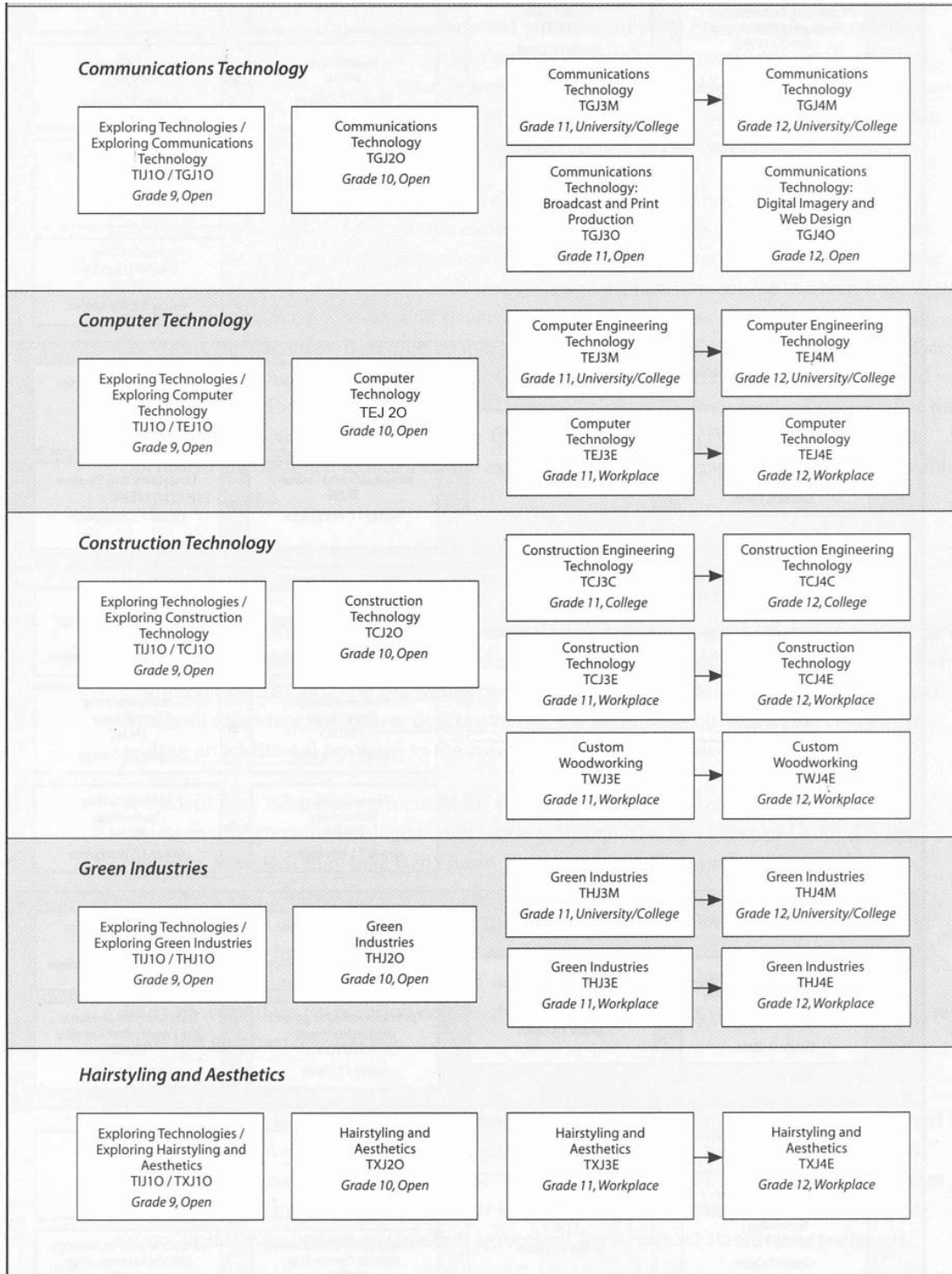
## Prerequisite Chart for Social Sciences and Humanities

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



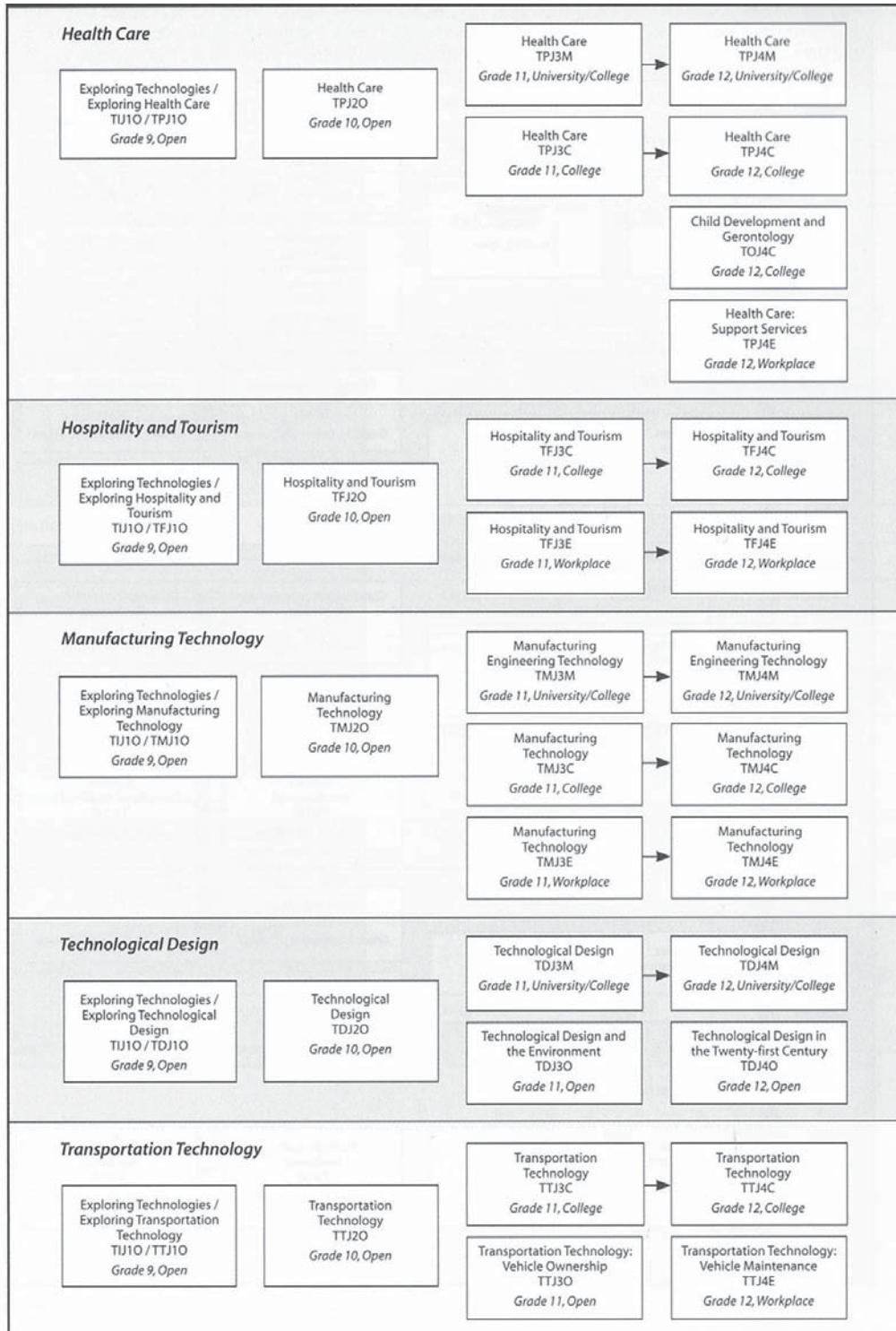
**Prerequisite Chart for Technological Education**

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.



## Prerequisite Chart for Technological Education, Cont'd

The chart maps out all the courses in the discipline and shows the link between courses and the possible prerequisites for them. It does not attempt to depict all possible movements from course to course.





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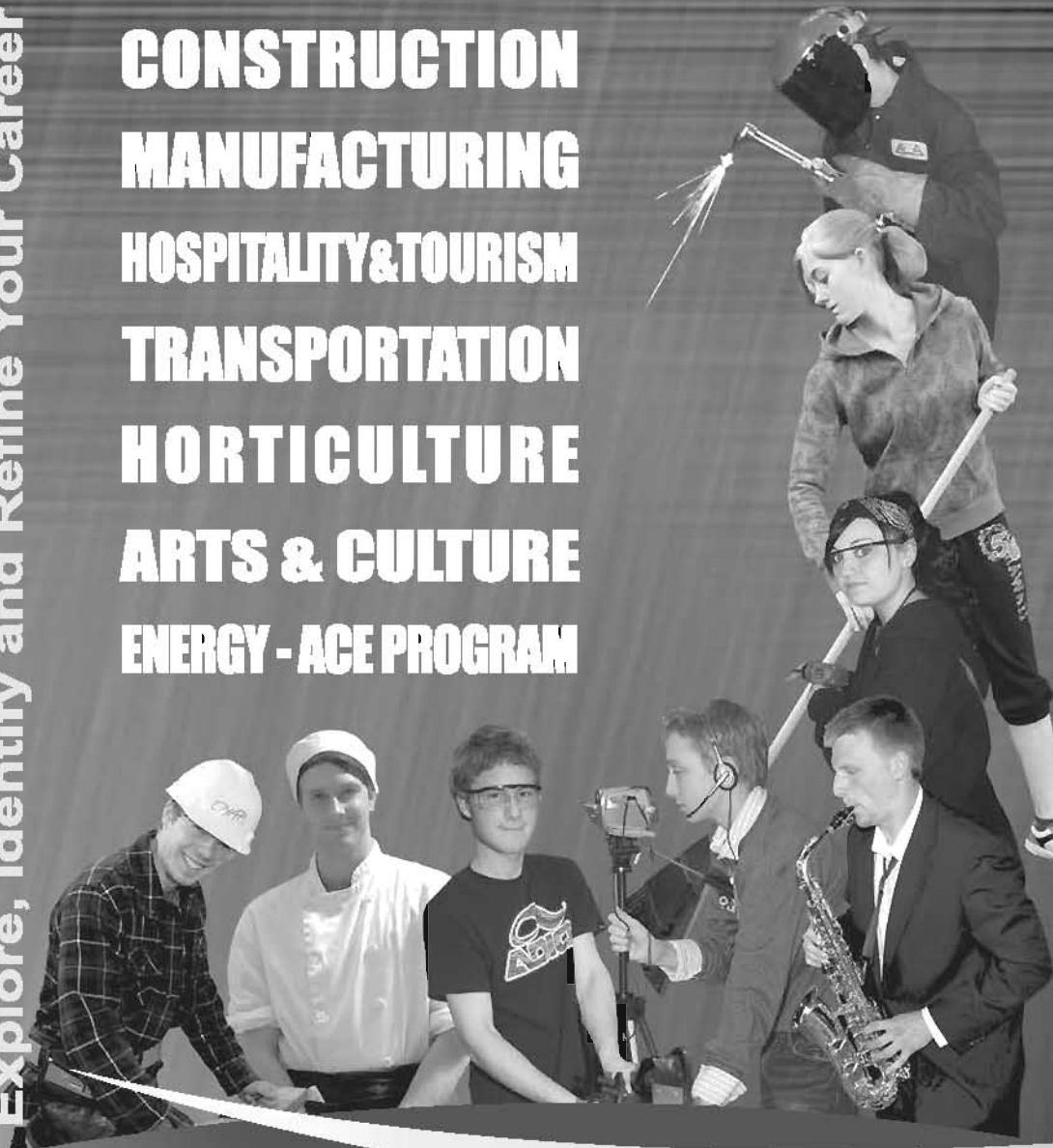
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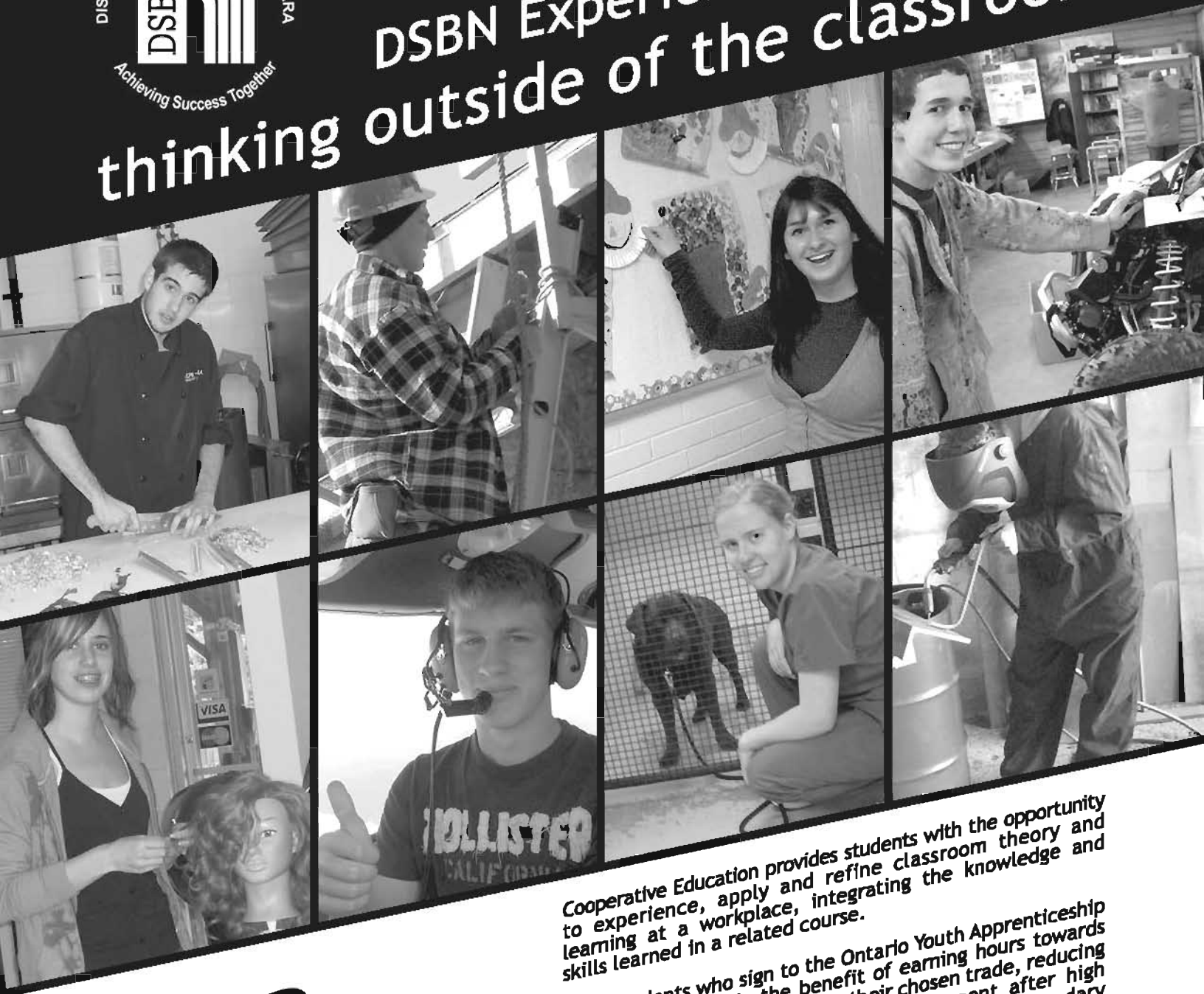
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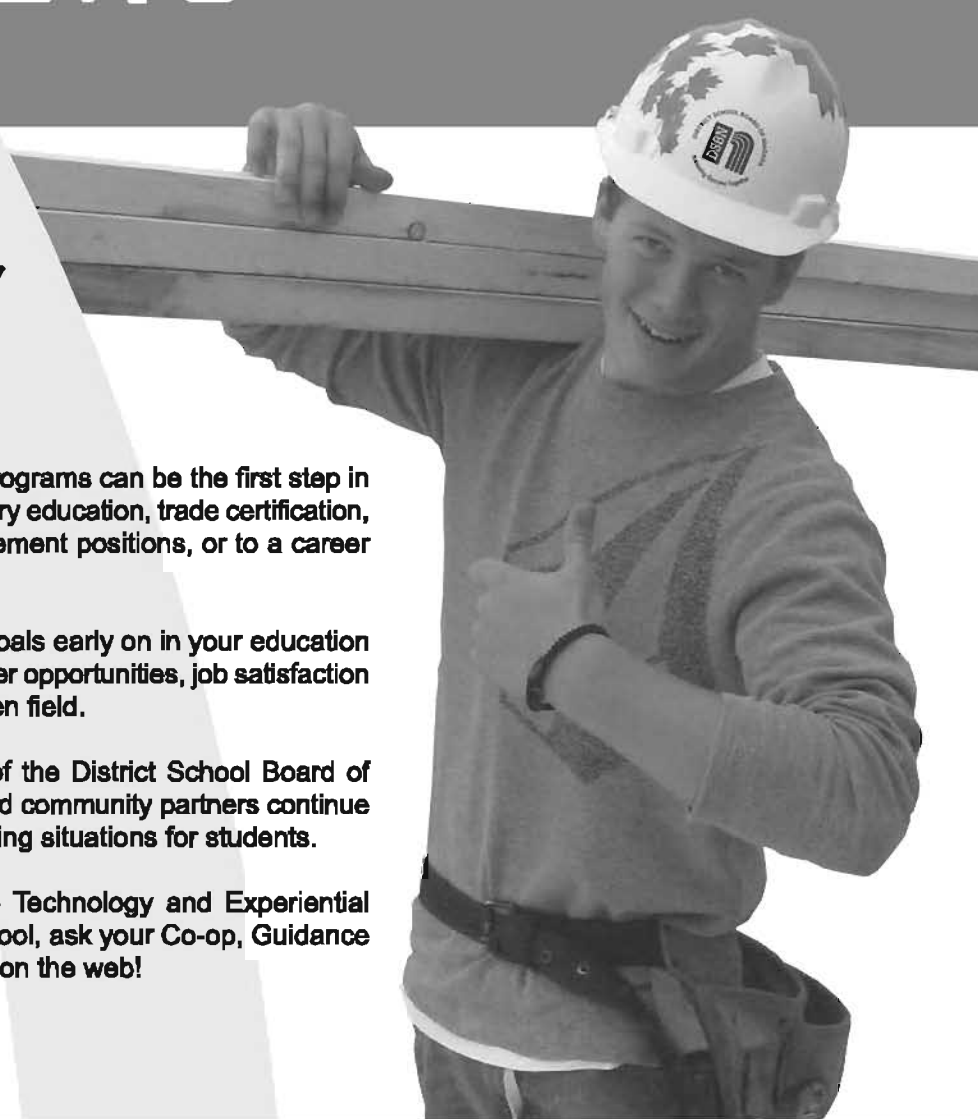
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# NOTES