



Maple Leaf
International
School

Secondary School Programme Course Calendar 2007-2008

www.mapleleaf-school.com/programmes/secondary

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STUDENT ACADEMIC RECORDS

ATTENDANCE POLICY

Regular and punctual attendances are key components of the learning process and for the evaluation of student achievement in all courses offered at MLIS. The Ontario Ministry of Education states *in Ontario Secondary Schools Grade 9 to 12, section 6.4:*

“Regular attendance at school is critical for the student’s learning and achievement of course expectations”

and it further states:

“Where, in the principal’s judgement, a student’s frequent absences from school are jeopardizing his or her successful completion of a course, school staff should meet with the student and the parents to explain the potential consequences of the absences, including failure to gain credits and discuss steps that could be taken to improve attendance”.

Parents are required to inform the school of the reason for the absences in writing or by telephone immediately on the return of the student to school. If at all possible the school should be informed in advance. Parents should avoid planning holidays during school time and where possible, schedule appointments after school hours. Only legitimate reasons for being absent for a final evaluation, such as a death in the immediate family or serious illness verified by a physician, will be accepted...

ONTARIO STUDENT RECORD (OSR)

The Ontario Student Record (OSR) is the confidential record of a student’s educational progress through school. The collection of the information, which is authorized by the Education Act, is filed in the Guidance Office. All students, and the parents/guardians of students under the age of 18, have the opportunity to examine the OSR and to receive a copy of its contents. Appointments can be made for this purpose.

THE ONTARIO STUDENT TRANSCRIPT (OST)

The Ontario Student Transcript (OST) provides an official record of the following:

- All grade 9 and 10 courses successfully completed by the student with percentage grades obtained and credits earned;
- All grade 11 and 12 courses completed or attempted by the student with percentage grades obtained and credits earned;
- Identification of compulsory credits including credits that are substitutions for compulsory credits identified by the Ministry of Education as diploma requirements;
- Confirmation that the student has completed the 40 hours of Community Involvement.
- Confirmation that the student has successfully completed the provincial Secondary School Literacy Test.

The Ontario Student Transcript is updated annually and is part of the Ontario Student Record (OSR).

- Withdrawals and repeated courses from grade 9 and 10 courses are not recorded on the OST. Only successfully completed courses are recorded on the OST for grade 9 and 10 students.

Course Calendar 2007-2008

- If a student withdraws from a grade 11 or 12 course within five instructional days following the issue of the first provincial 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 provincial report card in a semestered or non-semestered school, the withdrawal is recorded on the OST 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.
- Students who repeat a Grade 11 or 12 course that they have previously completed successfully earn only one credit for the course. However, each attempt as well as the percentage grade obtained is recorded on the OST, and an “R” is entered in the “Credit” column for the course(s) with the lower percentage grade.

A copy of the Transcript is provided with the report at the end of the school year.

CREDIT / COURSE / DIPLOMA INFORMATION

CREDIT DEFINITION

A **credit** is granted when a course of at least 110 hours is completed successfully.

Note: All courses listed in this calendar have a 1.0 credit value unless otherwise indicated.

COURSE TYPES

The secondary school program is a 4 year program (9-12)

<u>Two Divisions</u>	
<u>Intermediate 9-10</u>	<u>Senior (11-12)</u>
3 types of course	4 types of courses
Academic – university destination	U – level – university destination
Applied – college destination	M – level – university and/or college destination
Open – open access	C – level – college destination
	O – level – open access

* if exit destination is other than Ontario, Canada higher learning schools, thorough research for admission requirements is recommended as qualifying courses differ

- Copies of the Transcript are available with written request.

DIPLOMA REQUIREMENTS (ONTARIO SECONDARY SCHOOL DIPLOMA-O.S.S.D)

Total Credits minimum	- 30 Credits
Compulsory courses (or equivalent) required	- 18
Elective courses (or equivalent) required	- 12
Ontario Secondary Literacy Test – successful completion (see page 6)	
Community Involvement Hours required	- 40 hours

- Instructions / document for recording available from Guidance (see page 6)

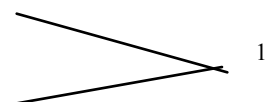
DIPLOMA REQUIREMENTS

COMPULSORY CREDITS	TOTAL REQUIRED
	18
• English	4
• Mathematics	3
• Science	2
• Spanish	1
• Canadian History	1
• Canadian Geography	1
• The Arts	1
• Physical/Health Education	1
• Civics	0.5
• Career Studies	0.5

ADDITIONAL COMPULSORY CREDITS - one from each of the following three (3) Groups:

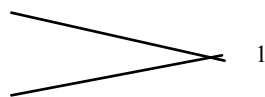
Group 1

- English
- Third Language
- Social Science and the Humanities
- Canadian and World Studies
- Learning Strategies
- Coop



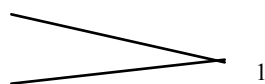
Group 2

- Physical and Health Education
- Arts
- Business Studies
- Coop



Group 3

- Science (Grade 11 or 12)
- Technological Studies
- Coop



OPTIONAL CREDITS

12*

*SEE APPROPRIATE GRADE OPTION SHEET

SUBSTITUTIONS FOR COMPULSORY COURSES

In order to meet the needs of individual students, the principal may replace up to three compulsory credit courses (or the equivalent in half courses) with courses from the remainder of those that meet the compulsory credit requirements. The principal will make the decision in consultation with the parent/guardian and appropriate school staff. Each substitution will be noted on the student's Ontario Student Transcript.

THE PROVINCIAL SECONDARY SCHOOL LITERACY TEST

All students must successfully complete the provincial secondary school literacy test in order to earn a secondary school diploma. Students will normally take the literacy test in October when they are in

Grade 10. The test will be based on the Ontario curriculum expectations for language and communication particularly reading and writing – up to and including Grade 9. However, students arriving after grade 10 are still required to write the literacy test and will be provided that opportunity in the second semester.

The test serves both to determine whether students have acquired the reading and writing skills considered essential for literacy and to provide confirmation that those students who have completed the test successfully have attained the provincial expectations for literacy. The test will identify those students who have not demonstrated the required skills and will identify areas in which these students need remediation. Maple Leaf will make available remedial assistance for students who do not complete the test successfully. This assistance will be designed to help students improve their skills so that they are better prepared to retake the literacy test.

Accommodations: Accommodations will be made to ensure students with special learning needs have a fair and equal opportunity to successfully complete the literacy test. While accommodations such as alternative forms of print and extra time are acceptable, the actual content of the secondary school literacy test must not be altered. Students requiring accommodation should identify themselves to the guidance counsellor upon entering Maple Leaf International School.

Deferrals: Students who might benefit from a deferral of the test may include students who have not yet acquired the level of proficiency in English required for successfully completing the test. If a parent requests a deferral, the school will determine whether or not a deferral should be granted and, if so, for what period of time. The school may also initiate consideration of a deferral in consultation with the parent.

COMMUNITY INVOLVEMENT REQUIREMENTS

Every student must complete 40 hours of Community Involvement activities in order to receive a graduation diploma. Maple Leaf International School students are required to complete 10 hours per year of attendance. Students experience the satisfaction that comes from helping other people, and gain valuable experiences working with volunteer groups and learning about service to people and organizations. The community benefits from the interest and enthusiasm of young people and our students extend their skills beyond the classroom and even provide work experiences for their resumes.

Students are encouraged to select many different community involvement activities in consultation with their parents. Selection of activities should take into account the age, maturity and ability of the student, the location and environment of the proposed activity, and the need for any special training, equipment and preparation. The safety of the student is paramount. Students are not paid for performing any community involvement activity.

The Community Involvement Passport and a list of eligible community involvement opportunities and organizations needing volunteers are available to students from Guidance.

Students must complete their community involvement activities while in grades 9 – 12. The Community involvement is completed outside of classroom hours. Students may complete activities:

- during lunch breaks
- during the summer months
- in the evening
- on weekends
- during school holidays
- during a spare period

Activities undertaken prior to the arrival in Grade 9 do not meet the requirements.

ONTARIO SECONDARY SCHOOL CERTIFICATE

A student who decides to leave school before earning the Ontario Secondary School Diploma will receive, on request, the Ontario Secondary School Certificate if a minimum of 14 credits are earned:

Compulsory Courses	Credits:		
English	2 credits	Total Compulsory Courses/Credit	6
Mathematics	1 credit	Elective Courses/Credits	8
Science	1 credit		
	— —		
Canadian History or Canadian Geography	1 credit	TOTAL	
Physical/Health Ed.	1 credit		
	14		

NOTES

1. Elective credits may be chosen from a broad range of options or may be chosen from the compulsory list.
2. Additional diploma requirements include successful completion of a literacy test and completion of Community Involvement requirements. (see page 6).

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. This certificate may be a useful means of recognizing achievement for students who plan to take certain vocational programs, other kinds of 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 accordingly, but will not be issued a new Certificate of Accomplishment.

STUDENT EVALUATION AND REPORTING

A number of evaluation methods are used throughout our courses to provide an accurate reflection of the level of success of each student. The types are numerous and reflect directly the nature of the course being studied. Final evaluations are held twice yearly, at the end of each semester (in January and June). A student's final achievement mark in a course is based on term work and exam results. The proportion is determined by Ministry policy at 70% term work and 30% final evaluation. Students receive report cards at mid-semester in both semesters as an indication of progress to that point.

REPORT CARDS

Four report cards will be issued to parents/guardians during the academic year:

Mid-semester:	November	Mid-semester II:	April
Semester I Final:	February	Semester II Final:	June

Grading is based on the following scale:

80-100% (A)	honours	Level 4 exceeds Ministry expectations
70-79% (B)	very good	Level 3 meets Ministry Provincial Standards
60-69% (C)	satisfactory	Level 2 approaching Ministry Standards
50-59% (D)	poor	Level 1 limited grasp of Ministry Expectations
Under 50%	failures	

Courses use the following evaluation schedule: 70% from term work, 30% from the final evaluation. The final evaluation may be an exam and/or culminating activity. Ontario schools do not use rank or grade point average.

TRINIDAD - ONTARIO EDUCATIONAL EQUIVALENCY

The following table can be used as an informal guide to compare placements in both systems. Other factors can be used in addition to these to place new students to Maple Leaf.

<u><i>The Trinidad Educational System</i></u>	<u><i>Maple Leaf International School</i></u>
<i>Form 1 completed</i> - - - - -	Grade Seven completed
<i>Form 2 completed</i> - - - - -	Grade Eight completed (preparation for Secondary school)
<i>Form 3 completed</i> - - - - -	Grade Nine completed (22 credits to be completed for OSSD)
<i>Form 4 completed</i> - - - - -	Grade Ten completed (14 credits to be completed for OSSD)
<i>Form 5 completed-</i> - - - - - <i>(credits to be completed for OSSD to be determined).</i>	The number of credits determined on a one-to-one basis to a maximum of 23. Credit equivalencies will only be granted for six CXC passes (7 credits to be completed for OSSD)
<i>Form Lower 6 completed</i> - - - - - <i>3 subjects passed</i>	(minimum of 7 credits to be completed for OSSD)
<i>Form Upper 6 completed--</i> - - - - - <i>or more Advanced level</i>	(minimum of 7 credits to be completed for 3 OSSD)

CURRICULUM DOCUMENTS

The Curriculum Policy documents for all of the courses offered by the school are on the website of the Ministry of Education for Ontario: www.edu.gov.on.ca

Outlines of each course taught at Maple Leaf are kept on file by the principal. These documents include the methods of assessment and evaluation of the students that will describe how they have met the expectations of each course. Parents may request a copy.

Students are given a course handout which includes the expectations for successful completion of each course.

ALTERNATE COURSE SOURCES - INDEPENDENT LEARNING CENTRE

Students may receive permission from the Principal to study courses in a "correspondence" mode through the Ontario Ministry of Education. This would normally satisfy some particular interest in a course Maple Leaf does not offer which may be needed for post-secondary studies. There is a cost for course materials and courier payments.

PRIOR LEARNING ASSESSMENT AND RECOGNITION

Students who wish to challenge an existing course at Maple Leaf International School in the hope of earning a credit(s) towards their Ontario Secondary School Diploma may do so providing:

- The student (and parent if the student is under the age of 18) initiates the challenge through the completion of the 'Application for Challenge for Credit for a Course', available in the Guidance Office.
- Upon review by appropriate school staff, evidence exists that leads the principal to believe that there is a reasonable opportunity for success.
- Maple Leaf International School can provide a qualified teacher to design and assess the work performed.
- The student or parent pay a TT\$600.00 assessment fee to cover the costs associated with the development and evaluation of the PLAR instruments.

Students may earn no more than four credits through the challenge process, including a maximum of two credits in any one discipline. Challenges may only occur for a credit at the grade 10, 11, and 12 levels. A student's level of achievement will be recorded as a percentage grade on the OST in the same way as achievement in other courses. These provisions are consistent with the Ministry document issued July 6, 2001.

COOPERATIVE EDUCATION PROGRAM

A cooperative education course must be based on a related course (or courses) from an Ontario curriculum policy document or on a ministry-approved locally developed course in which the student is enrolled or which he or she has successfully completed. The cooperative education course and the related course (or courses) together constitute a student's cooperative education program, designed to suit the student's strengths, interests, and needs and to enhance the student's preparation for the future.

Cooperative education courses include a classroom component, comprising pre-placement and integration activities, and a placement component. Students earn credits through cooperative education by integrating classroom theory with planned learning experiences in the community to achieve learning based on the curriculum expectations of the related course.

Students apply to take a cooperative education course during the course selection process. A counselling and interviewing process—conducted by cooperative education teachers in collaboration with guidance counsellors and administrators—determines applicants' suitability for the program. Prior to their placements, students attend structured orientation sessions as part of the classroom component of the program.

In collaboration with students, subject teachers, cooperative education teachers prepare personalized placement learning plans that include a description of the curricular knowledge and skills and the employability skills that students will demonstrate at their placements. Cooperative education teachers also conduct placement learning assessments and evaluate their students' performance in pre-placement, placement, and reflective learning activities. Students share and analyse their placement experiences with their teachers and peers in structured integration sessions.

For further information on Cooperative Education, refer to the course description on page 29.

POST-SECONDARY SCHOOL REQUIREMENTS

HIGHER LEARNING INSTITUTIONS EXPECTATIONS

The Maple Leaf International operational structure and program delivery is geared toward University/College admission in Ontario – Canada. The Ontario Secondary School Diploma (O.S.S.D.) is recognized worldwide and to that end Maple Leaf International works to prepare the graduates for a variety of destinations. The chart on page 19 helps explain the marking scheme.

GENERAL GUIDE FOR UNIVERSITY / COLLEGE ADMISSION

Ontario, Canada

When a student applies to an Ontario Community Colleges and / or University the marks are sent automatically from our school. All other applications are done independently so if transcripts are required you must speak to Ms. Trotman, Guidance Administrative Assistant.

Ontario Community Colleges

Ontario Community Colleges have a large variety of excellent programs. They offer:

Certificate Programs – 1 year
Diploma Programs – 2-3 years
Applied Degrees – 4 years

For certificate and diploma programs the requirements are a minimum of:

Completion of the Ontario Secondary School Diploma (OSSD).
Most programs also require a grade 12 English at the College or University level.

For more specific requirements you need to consult the individual college website.
www.ontariocolleges.ca

Applied Degrees

The Ontario Ministry of College and Universities has given some colleges the ability to confer a university degree for some programs. These applied degrees have the same admission requirements as the Ontario Universities but you can apply to them with the on-line College Application Form. www.osca.ca

Ontario Transfer Guide

There are transfer agreements between many Ontario universities and colleges, where you may transfer programs from Ontario colleges to Ontario universities and vice versa.

The pathways described in this guide are provided for general information and planning. All pathways are limited to those students who have the prerequisites and attain the academic standing specified in the agreement.

Moreover, even if all prerequisites are met, admission to the destination program is not guaranteed; admission is generally on a competitive bases. Please contact the Admissions Office of the “receiving” institution/program that you are considering for more details and information about transfer opportunities. www.ocutg.on.ca.

Ontario Universities

Ontario Universities require a minimum of six (6) Grade 12 University or University / College courses. These are courses that have a U or M as the 5th character in the course code.

The universities will **not** accept College or Open courses for admission. These are courses that have C or O as the fifth character in the course codes.

Example:

ENG4U or HSB4M > accepted for admission

PPL4O or ENG4C > not accepted for admission

Most University programs have specific course requirements. It is important that you research these requirements. www.electronicinfo.ca

If the university asks for a Grade 12 course as a **prerequisite** they will **not** accept you without it. However, if the university states that it is a **recommended** course they will still consider your application. You should be aware that if you don't have a recommended course the University may accept you into the program and require that you take that course in your first year.

COURSE REQUIREMENTS SUMMARY

UNIVERSITY

- Ontario Secondary School Diploma (OSSD)
- 6 grade 12 "U" and/or "M" levels
- Grade 12 "U" English plus 5 other
- Within the 5 remaining course for admission average, schools may demand specific program prerequisites and grade levels. Refer to: www.electronicinfo.ca

COLLEGE

- Ontario Secondary School Diploma (OSSD)
- Courses for admission must **always** include grade 12 "U" or "C" level English.
- Admission requirements **may** include other courses

*Admission requirements **may vary** from school to school and from program to program (consult school's website for accuracy)

After option sheets have been returned, course changes may be made for the following school year up to the last day of April. This is conditional on space being available in courses. **Limited course changes** will also be considered on days allocated at the start of the school year.

The course descriptions that follow in Section IV are arranged by program. They are provided for the guidance of students in selecting courses. Students are reminded to pay particular attention to the Ministry prerequisites and any recommended background for courses. Any questions should be directed to the Guidance Counsellors.

MARK INTERPRETATION CHART

HIGH SCHOOL CONVERSION CHART FOR UNIVERSITY/COLLEGE

The numeric marks for each course is converted to a grade point equivalent and letter grade using the following conversion chart.

Numeric Grade (MLIS)	US Grade Point Equivalent	CXC/GCE Equivalent	Letter Grade Equivalent
90-100	4	1	A+
85-89	4	1	A
80-84	4	1	A-
76-79	3	2	B+
75	3	2	B
70-74	3	2	B-
66-69	2	3	C+
65	2	3	C
60-64	2	3	C-
50-59	1	4	D
Below 50	0	5	Failure

SECONDARY COURSE PROGRAMS

COURSE SELECTION PROCESS

The school administration and staff create a roster of courses based on student needs, diploma requirements, school size, finances, and staff expertise. Courses described on the following pages are **POSSIBLE OFFERINGS for the 2007-2008** academic year. Students should be mindful of compulsory requirements and prerequisites for further study when making choices.

As all courses may not be offered, students should choose alternatives. When a student and parent sign the OPTION SHEET they are agreeing to a **full semester commitment** to the courses chosen. Students and their parents must take this process seriously. A wise selection of courses allows a smooth start to the academic year and facilitates greater academic success. These courses cannot be changed or dropped when a student finds work too difficult or the course is not what was expected. Teachers and the Guidance Counsellors are available to discuss course selections with students throughout the course selection process. All course changes are subject to parent, teacher and administration approval. **After option sheets have been returned, course changes may be made for the following school year up to the last day of April.** This is conditional on space being available in courses. **Limited course changes** will also be considered on days allocated at the start of the school year.

The course descriptions that follow are arranged by program area to provide easy understanding of the flow of courses. They are provided for the guidance of students in selecting courses. Students are reminded to pay particular attention to the **Ministry prerequisites** and any recommended background for courses. Any problems should be directed to the Guidance Counsellors.

The 2007-2008 courses offered will not be timetabled if the number of students requesting the course is insufficient.

THE ORGANIZATION OF SECONDARY SCHOOL COURSES

The secondary school program is designed to provide all students with the essential knowledge and skills that they will need for the future, as well as the opportunity to specialize in areas that are related to their post-secondary goals.

GRADES 9 AND 10

In grades 9 and 10, three types of courses are offered: academic, applied and open courses.

Academic Courses (D)

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

Applied courses (P)

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

Open Courses (O)

Open courses have one set of expectations for the discipline, appropriate for all students in a given grade. These courses are designed to prepare students for further study in certain subjects and to enrich their education.

Students will have the opportunity to select a combination of academic, applied, and open courses. **Upon successful completion of an academic or applied grade 9 course, students may choose to enter either the academic or applied course in the same subject in grade 10.**

GRADES 11 AND 12

In grades 11 and 12, the Ontario Curriculum has courses designed to prepare students for their post-secondary destinations. These include university preparation courses; university/college preparation courses; college preparation courses and workplace preparation courses. Open courses are also offered in grades 11 and 12.

Workplace Preparation Courses (E) (* not currently offered at MLIS)

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. Teaching and learning will emphasize workplace applications of the course content, and will also explore the theoretical material that underlines these practical applications. Cooperative education and work experience placements within the community are important components of workplace preparation courses. Schools will involve employers and site supervisors in the planning of cooperative education and work experience placements, and will ensure that they have their cooperation and support in implementing these courses. Workplace preparation courses will be based on rigorous provincial curriculum expectations and will emphasize the development of generic employment skills, as well as independent research and learning skills. Students will be required to demonstrate that they have developed these skills. Workplace preparation courses in particular should also promote the importance of lifelong learning.

College Preparation Courses (C)

College preparation courses are designed to equip students with the knowledge and the 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. Teaching and learning will emphasize concrete applications of the theoretical material covered in the course, and will also emphasize the development of critical thinking and problem solving skills. All college preparation courses will be based on rigorous provincial curriculum expectations and will emphasize the development of both independent research skills and independent learning skills. Students will be required to demonstrate that they have developed these skills.

University/College Preparation Courses (M)

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. The range of courses offered and the content of these courses will allow students to prepare for college and university programs and related careers. Teaching and learning will emphasize both theoretical aspects and related concrete applications of the course content. All university/college preparation courses will be based on rigorous provincial curriculum expectations and will emphasize the development of both independent research skills and independent learning skills. Students will be required to demonstrate that they have developed these skills.

University Preparation Courses (U)

University preparation courses are designed to equip students with the knowledge and skills they need to meet the entrance requirements for university programs. The range of courses offered and the content of these courses will allow students to prepare for university programs and related careers. Teaching and learning will emphasize theoretical aspects of the course content but will be based on rigorous provincial curriculum expectations and will emphasize the development of both independent research skills and independent learning skills. Students will be required to demonstrate that they have developed these skills.

Open Courses in Grades 11 and 12 (O)

Open courses in grades 11 and 12 allow students to broaden their knowledge and skills in a particular subject that may or may not be directly related to their post-secondary goals, but that reflects their interests. These courses are appropriate for all students regardless of post-secondary destination. These courses are designed to provide students with a broad educational base and to equip them for active and rewarding participation in society. **They are not designed with the specific requirements of university or college programs or the workplace in mind. Grade 12 Open courses are not be used for university or college admission purposes.**

EXPLANATION OF COURSE CODES

Course Codes, Prerequisites and Descriptions

Each secondary school course is identified by a five character code

The first three characters refer to the subject.

Example: ENG is English

The fourth character refers to the grade or level.

1, 2, 3, 4 refers to grades 9, 10, 11, 12 respectively.

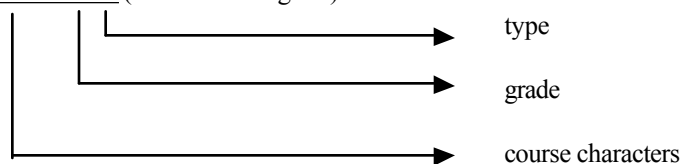
The fifth character refers to the type of course.

D = academic; P = applied; O = open; U = university; C = college;

M = university/college; E = workplace

For example, the code for grade 9 Academic English is:

ENG1D (Academic English)



Course prerequisites can be found by referring to the italics text in the course charts. When choosing courses, make sure you refer to the prerequisites and to the OSSD diploma requirements.

All courses listed have a credit value of 1.0 unless otherwise indicated. Prerequisites are noted where applicable. If none are listed, there are no prerequisites.

COURSE DESCRIPTIONS

ARTS

MUSIC

AMU10 MUSIC: PAN (STEEL DRUM) Grade 9, Open

This course emphasizes the performance of music at a level that strikes a balance between challenge and skill and is aimed at developing technique, sensitivity, and imagination. Students will participate in creative activities that teach them to listen with understanding. They will also learn correct musical terminology and its appropriate use.

AMU20 MUSIC: PAN (STEEL DRUM) Grade 10, Open

This course is for students wishing to play in a steel band. Beginners will develop the techniques for playing pan and in subsequent years continue the development of those skills. Students will study the history of pan and Carnival. The course will also include listening and creative compositions.

AMU30 MUSIC – Pan (Steel Drum), Grade 11, Open

This course develops students' artistic knowledge and skills through the performance of music and the preparation of music productions. Students will perform appropriate works, particularly works in contemporary popular styles. Independently and in groups, they will also plan, market, and produce music productions, making use of appropriate technology, and will evaluate the results. *Prerequisite: AMU10 or AMU20, Grade 9 or 10 Music, Open*

AMU4M MUSIC, Grade 12, University/College Preparation)

This course emphasizes the appreciation, analysis, and performance of music from the romantic period and the twentieth century, including art music, jazz, popular music, and Canadian and non-Western music. Students will concentrate on developing interpretive skills and the ability to work independently. They will also complete complex creative projects. *Prerequisite: AMU30 Music, Grade 11, Open*

VISUAL ARTS

AVI10 VISUAL ARTS Grade 9, Open

This course offers 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 through working with a range of materials, processes, techniques, and styles. They will learn and use methods of analysis and criticism and will study the characteristics of particular historical art periods and a selection of Canadian art and the art of other cultures.

AVI20 VISUAL ARTS, Grade 10, Open

This course emphasizes learning through practice; building on what students know; and introducing them to new ideas, materials, and processes for artistic thinking and experimentation. Student learning will include the refined application of the elements and principles of design, incorporating the creative and design processes, and the relationship between form and content. Students will also learn about the connections between works of art and their historical contexts. Course objectives may be achieved either through a comprehensive program or through a program focused on a particular art form (e.g., drawing, painting).

AVI30 VISUAL ARTS, Grade 11, Open

This course focuses on studio activities on one or more of the visual arts. Students will create art works that explore a wide range of subject matter, and will evaluate art works using specific criteria. They will also examine historical and cultural contexts of Western art (including Canadian art) and art from various world cultures to support their study of specific media. *Prerequisite: AVI10 or AVI20, Grade 9 or 10 Visual Arts, Open*

AVI4M VISUAL ARTS Grade 12, University/College Preparation

This course focuses on the refinement of students' skills and knowledge in visual arts. Students will analyse art forms; use theories of art in analysing and producing art; and increase their understanding of stylistic changes in modern and contemporary Western art, Canadian (including Native Canadian) art, and art forms from various parts of the world. Students will produce a body of work demonstrating a personal approach. *Prerequisite: AVI30, Grade 11 Visual Arts, Open*

BUSINESS STUDIES

BBI10 INTRODUCTION TO BUSINESS, Grade 9 or 10, Open

This course introduces students to the world of business. Students will develop an understanding of the functions of business, including accounting, marketing, information and communication 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.

BTT20 INFORMATION AND COMMUNICATION TECHNOLOGY IN BUSINESS, Grade 9 or 10, Open

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

BAF3M FINANCIAL ACCOUNTING FUNDAMENTALS, Grade 11, University/College Preparation

This course introduces students to the fundamental principles and procedures of accounting. Students will develop financial analysis and decision-making skills that will assist them in future studies and/or career opportunities in business. Students will acquire an understanding of accounting for a service and a merchandising business, computerized accounting, financial analysis, and ethics and current issues in accounting. *Prerequisite: None*

BDI3C ENTREPRENEURSHIP:THE VENTURE, Grade 11, College Preparation

This course focuses on ways in which entrepreneurs recognize opportunities, generate ideas, and organize resources to plan successful ventures that enable them to achieve their goals. Students will create a venture plan for a 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. *Prerequisite: None*

BMI3C MARKETING: GOODS, SERVICES, EVENTS, Grade 11, 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. *Prerequisite: None*

BAT4M FINANCIAL ACCOUNTING PRINCIPLES, Grade 12, 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: Financial Accounting Fundamentals, Grade 11, University/College Preparation*

BBB4M INTERNATIONAL BUSINESS FUNDAMENTALS, Grade 12, 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. *Prerequisite: None*

**BOH4M BUSINESS LEADERSHIP: MANAGEMENT FUNDAMENTALS, Grade 12,
University/College Preparation**

This course focuses on the development of leadership skills used in managing a successful business. Students will 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. *Prerequisite: None*

CANADIAN AND WORLD STUDIES

CGC1D GEOGRAPHY OF CANADA Grade 9, Academic

This course uses a variety of frameworks, including ecozones and principles of physical, human and economic geography, to explore the distinct and evolving character of Canada's geography. Students will investigate the interconnections between the environment and human activities in Canadian ecozones in order to understand Canada's diversity and role in the world.

CHC2D CANADIAN HISTORY IN THE TWENTIETH CENTURY, Grade 10, Academic

This course explores Canadian participation in global events and traces Canada's development as a country through changes in population, economy and technology. Students will analyse the elements that constitute Canadian identity, learn the stories of both individuals and communities, and study the evolution of political and social structures. Students will learn about differing interpretations of the past, and will come to understand the importance in historical studies of chronology and cause-and-effect relationships. They will also learn to develop and support a thesis, conduct research and analysis, and effectively communicate the results of their inquiries.

CHV2O CIVICS, Grade 10 Open, (1/2 credit taken with GLC20) – Credit Value .50

This course explores what it means to be an informed, participating citizen in a democratic society. Students will learn about the elements of democracy and the meaning of democratic citizenship in local, national and global contexts. In addition, students will learn about social change, examine decision-making processes in Canada, explore their own and others' beliefs and perspectives on civics questions, learn how to think and act critically and creatively about public issues.

**CGF3M PHYSICAL GEOGRAPHY: Patterns, Processes, and Interactions, Grade 11,
University/College Preparation**

This course examines the main elements of the physical environment (climate, soils, landforms, oceans, and vegetation), the processes that shape them, and the relationship between the environment and human beings. Students will apply a wide range of geographic tools and methods to explore the distribution and ongoing evolution of the elements of the physical environment on a variety of scales, from local to global. *Prerequisite: CGC1D, Grade 9 Geography of Canada, Academic*

**CHW3M WORLD HISTORY TO THE SIXTEENTH CENTURY, Grade 11, University
/College Preparation**

This course investigates the history of humanity from the earliest times to the sixteenth century. Students will analyse diverse societies from the around the world, with particular regard to the political, cultural, and economic structures and historical forces that form the foundation of the modern world. They will examine the influence of selected individual and groups, as well as the particular innovations, and will develop skills of historical inquiry, organization, analysis, and communication. *Prerequisite: CHC2D, Grade 10 Canadian History in the Twentieth Century, Academic*

CLU3M UNDERSTANDING CANADIAN LAW Grade 11, University/College Preparation

This course explores legal issues that directly affect students' lives. Students will acquire a practical knowledge of Canada's legal system and learn how to analyse legal issues. They will also be given opportunities to develop informed opinions on legal issues and to defend those opinions and communicate legal knowledge in a variety of ways and settings, including legal research projects, mock trials, and debates. *Prerequisite: CHC2D, Grade 10 Canadian History in the Twentieth Century, Academic*

**CGU4U WORLD GEOGRAPHY: Human Patterns and Interactions, Grade 12,
University Preparation**

This course examines how cultures in different parts of the world interact with their environments and with each other. Students will use geographic concepts, methods, and tools to explore settlement patterns; human migration, cultural change, globalization, environmental issues, and other topics relevant to an understanding of how spatial, political, economic, and social factors affect settled environments and human activities. *Prerequisite: Any university or university/college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

CHY4C WORLD HISTORY: The West and the World, Grade 12, College Preparation

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 acquire sound skills of historical inquiry and will develop an appreciation of 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*

CHY4U WORLD HISTORY: The West and the World, Grade 12, University Preparation

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. The skills and knowledge developed in this course will enable students to understand and appreciate both the character of historical change and the historical roots of contemporary issues. *Prerequisite: Any university or university/college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

**CIA4U ANALYSING CURRENT ECONOMIC ISSUES, Grade 12, University
Preparation**

This course explores the choices that individuals and societies make about the use of resources in a competitive global economy. Students will use economic concepts and models, as well as methods of economic inquiry, to analyse current economic issues and make informed economic choices based on their analysis. *Prerequisite: Any university or university/college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities*

CLN4U CANADIAN AND INTERNATIONAL LAW, Grade 12, University Preparation

This course explores elements of Canadian law and the role of law in social, political, and global contexts. Students will learn about the connections between the historical and philosophical sources of law and issues in contemporary society. They will also learn to analyse legal issues, conduct independent research, and communicate the results of their inquiries in a variety of ways. *Prerequisite: Any university or*

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

CPW4U CANADIAN AND WORLD POLITICS, Grade 12, University Preparation

This course examines national and international political issues from a variety of perspectives. Students will learn about the rights and responsibilities of individuals, groups, and states within the international community; analyse the different ways in which Canada tries to settle its conflicts with other nations; and evaluate the role of nationalist and internationalist ideologies in shaping relations among states.

Prerequisite: Any university or university/college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities

ENGLISH

ENG1D ENGLISH Grade 9, Academic

This course emphasizes the analytical reading, writing, oral communication and thinking skills that students need for success in secondary school academic programs and their daily lives. Students will study and interpret texts from contemporary and historical periods, including short stories, poems, and short essays and will investigate and create media works. An important focus will be the correct and effective use of spoken and written language.

ENG1P ENGLISH, Grade 9, Applied

This course emphasizes key reading, writing, oral communication, and thinking skills that students need for success in secondary school and their daily lives. Students will study plays, short stories, and newspaper and magazine articles, and will describe and create media works. An important focus will be the correct use of spoken and written language.

ENG2D ENGLISH, Grade 10, Academic

This course extends the range of analytic, reading, writing, oral communication, and thinking skills that students need for success in secondary school academic programs. Students will study and interpret challenging texts from contemporary and historical periods, including novels, poems, plays, and opinion pieces, and will analyse and create effective media works. An important focus will be the thoughtful use of spoken and written language. *Prerequisite: ENG1D or ENG1P, English Grade 9 Academic or Applied*

ENG2P ENGLISH, Grade 10, Applied

This course extends the range of key reading, writing, oral communication, and thinking skills that students need for success in all areas of the curriculum. Students will study novels, poems, magazines, and reports, and will describe, design, and produce effective media works. An important focus will be the clear and coherent use of spoken and written language. *Prerequisite: ENG1P or ENG1D, English Grade 9 Applied or Academic*

ENG3C ENGLISH, Grade 11, College Preparation

This course emphasizes the development of literacy, critical thinking, and communication skills. Students will study the content, form, and style of informational texts and literary works from Canada and other countries; write reports, correspondence, and persuasive essays; and analyse media forms, audiences, and media industry practices. An important focus will be on establishing appropriate voice and using business and technical language with precision and clarity. *Prerequisite: ENG2P or ENG2D Grade 10 English, Applied or Academic*

ENG3U ENGLISH, Grade 11, University Preparation

This course emphasizes the development of literacy, critical thinking, and communication skills. Students will analyse challenging texts, both contemporary and historical; conduct research and analyse the information gathered; write persuasive and literary essays; and analyse the relationship among media forms, audiences, and media industry practices. An important focus will be on understanding the development of the English language. *Prerequisite: ENG2D, Grade 10 English, Academic*

EPS3O PRESENTATION AND SPEAKING SKILLS, Grade 11, Open

This course emphasizes the knowledge and skills required to plan and make effective presentations and to speak effectively in both formal and informal contexts, using such forms as reports, speeches, debates, panel discussions, storytelling, recitations, interviews, and multimedia presentations. Students will research and analyse the content and characteristics of convincing speeches and the techniques of effective speakers; design and rehearse presentations for a variety of purposes and audiences; select and use visual and technological aids to enhance their message; and assess the effectiveness of their own and others' presentations. ***Prerequisite: ENG2D, Grade 10 Academic***

ENG4C ENGLISH, Grade 12, College Preparation

This course emphasizes consolidation of literacy, critical thinking, and communication skills. Students will analyse informational texts and literary works from various time periods, countries, and cultures; write research reports, summaries, and short analytical essays; complete an independent study project; and analyse the interactions among media forms, audiences, and media industry practices. An important focus will be on establishing appropriate style and using business and technical language effectively.

Prerequisite: ENG3C or ENG3U, Grade 11 English, College or University Preparation

ENG4U ENGLISH, Grade 12, University Preparation

This course emphasizes consolidation of literacy, critical thinking, and communication skills. Students will analyse a range of challenging texts from various time periods, countries, and cultures; write analytical and argumentative essays and a major paper for an independent literary research project; and apply key concepts to analyse media works. An important focus will be on understanding academic language and using it coherently and confidently in discussion and argument. ***Prerequisite: ENG3U, Grade 11 English, University Preparation***

EWC4U THE WRITER'S CRAFT, Grade 12, 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: ENG3U, Grade 11 English, University Preparation***

INTERNATIONAL LANGUAGES

LWSBD SPANISH Academic (Level 2)

This course is 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. ***Prerequisite: Previous Knowledge or Education in Spanish***

LWSCU SPANISH (Level 3)

This course provides students with the language learning experiences that will enable them to communicate in the language of study. Students will continue to develop and apply their speaking skills in a variety of contexts, and will participate in activities that will improve their reading comprehension and writing skills. They will also continue to explore aspects of the culture of countries where the language under study is spoken by taking part in community-sponsored events and activities involving both print and technological resources. Although students will continue to expand their vocabulary and repertoire of language structures, the language they will use at this level will still be simple. ***Prerequisite: LWSBD (Level 2)***

LWSDU SPANISH, Level 4, University Preparation

This course offers students opportunities to further develop their knowledge of Spanish and to enhance their communication skills. Students will use increasingly sophisticated language in a variety of activities that will enable them to speak and write with clarity and accuracy. Students will also enhance their thinking skills through the critical study of literature, and continue to explore aspects of the culture of countries where Spanish is spoken through a variety of print and technological resources. ***Prerequisite: LWSCU, Grade 10 Spanish (Level 3) can be used for university admission***

GUIDANCE AND CAREER EDUCATION

GLS10 LEARNING STRATEGIES 1: Skills for Success in Secondary School, Grade 9, Open

This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace, and the community. This course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond. *Prerequisite: None*

GLC20 CAREER STUDIES, Grade 10 Open, (1/2 credit, taken with CHV20) Credit Value .50

This course teaches students how to develop and achieve personal goals in education and work and contribute to their communities. Student learning will include assessing their own knowledge, skills and characteristics and investigating economic trends, workplace organization, work opportunities, and ways to search for work. The course explores post-secondary learning options, prepares students for community-based learning, and helps them build the capabilities needed for managing work and life transitions. Students will design action plans for pursuing their goals

GLE20 LEARNING STRATEGIES 2: Skills for Success in Secondary School, Grade 10, Open

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

XCOOPB COOPERATIVE EDUCATION, GRADE 12 (2 credits)

Cooperative education integrates classroom theory with workplace experience. Senior students can earn additional credits in a subject area already studied by completing hours at a related job placement. The program is a partnership of school and business/industry and involved students, teachers and employers.

Students will participate in a half-day (2 period) Cooperative Education program. Students complete 220 hours on the job and in school sessions (pre-employment and integration sessions) for 2 credits which apply toward the Ontario Secondary School Diploma.

HEALTH AND PHYSICAL EDUCATION

PPL10 HEALTHY ACTIVE LIVING EDUCATION Grade 9, Open

This course emphasizes student's daily participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Students will learn movement techniques and principles, ways to improve personal fitness and physical competence, and safety/injury-prevention strategies. 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

PPL20 HEALTHY ACTIVE LIVING EDUCATION, Grade 10, 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.

PPL30 HEALTHY ACTIVE LIVING EDUCATION, Grade 11, Open Credit

This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities that have the potential to engage students' interest throughout their lives. Students will be encouraged to develop personal competence in a variety of movement skills, and will be given opportunities to practise 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.

PPL40 HEALTHY ACTIVE LIVING EDUCATION, Grade 12, Open

This course focuses on the development of a personalized approach to healthy active living through participation in a variety of sports and recreational activities that have the potential to engage students' interest throughout their lives. Students will develop and implement personal physical fitness plans. In addition, they will be given opportunities to refine their decision-making, conflict-resolution, and interpersonal skills, with a view to enhancing their mental health and their relationships with others.

PSE4U EXERCISE SCIENCE, Grade 12, University Preparation

This course focuses on the study of human movement and of systems, factors, and principles involved in human development. Students will learn about the effects of physical activity on health and performance, the evolution of physical activity and 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*

MATHEMATICS

MFMI1 FOUNDATIONS OF MATHEMATICS, Grade 9, Applied

This course enables students to develop mathematical ideas and methods through the exploration of applications, the effective use of technology, and extended experiences with hands-on activities. Students will investigate relationships of straight lines in analytic geometry, solve problems involving the measurement of 3-dimensional objects and 2-dimensional figures, and apply key numeric and algebraic skills in problem solving. Students will also have opportunities to consolidate core skills and deepen their understanding of key mathematical concepts.

MPMID PRINCIPLES OF MATHEMATICS Grade 9, Academic

This course enables students to develop generalizations of mathematical ideas through exploration of applications, the effective use of technology and abstract reasoning. Students will investigate relationships to develop equations of straight lines in analytic geometry, explore relationships between volume and surface area of objects in measurement and apply extended algebraic skills in problem solving. Students will engage in abstract extensions of core learning that will deepen their mathematical knowledge and enrich their understanding.

MF2P FOUNDATIONS OF MATHEMATICS, Grade 10, Applied

This course enables students to consolidate their understanding of key mathematical concepts through hands-on activities and to extend their problem-solving experiences in a variety of applications. Students will solve problems involving proportional reasoning and the trigonometry of right triangles, investigate applications of piecewise linear functions; solve and apply systems of linear equation; and solve problems involving quadratic functions. The effective use of technology in learning and in solving problems will be a focus of the course. This course will not lead to university programs requiring math. *Prerequisite: MF2P or MP2D, Mathematics Grade 9 Academic or Applied*

MP2D PRINCIPLES OF MATHEMATICS, Grade 10, Academic

This course enables students to broaden their understanding of relations, extend their skills in multi-step problem solving, and continue to develop their abilities in abstract reasoning. Students will pursue investigations of quadratic functions and their applications; solve and apply linear systems; solve multi-step problems in analytic geometry to verify properties of geometric figures; investigate the trigonometry of right and acute triangles and develop supporting algebraic skills. *Prerequisite: MP2D or MF2P, Mathematics Grade 9 Academic or Applied*

MCR3U FUNCTIONS, Grade 11, University Preparation

This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; investigate inverse functions; and develop facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems. *Prerequisite: Principles of Mathematics, Grade 10, Academic*

MBF3C FOUNDATIONS FOR COLLEGE MATHEMATICS, Grade 11, College Preparation

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

MCF3M FUNCTIONS AND APPLICATIONS, Grade 11, University/College Preparation

This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in 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*

MAP4C FOUNDATIONS FOR COLLEGE MATHEMATICS, Grade 12, College Preparation

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; apply measurement in designing and constructing physical models; solve financial problems connected with home ownership; 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.*

MCV4U CALCULUS AND VECTORS, Grade 12, University Preparation

