

Welcome Bienvenue Biindigen

HAMMARSKJOLD

HIGH SCHOOL

School ColoursSchool TeamStudent PopulationFoundedRed & GoldVikings9701962

PrincipalVice PrincipalStudent Services ChairMr. D. DiBlasioMrs. Z. BlackMrs. R. Lucas

Mrs. B. Krawchuck

Family of Schools

École Elsie MacGill (FI) • Algonquin Avenue • C.D. Howe • Claude E. Garton (FI) École Gron Morgan • Woodcrest

Grade 9 at Hammarskjold High School | 2026-26

Students along with parents/guardians determine compulsory course type during Grade 9 Registration in February. French Immersion students will have some compulsory course preselected for them.

Mathematics - Pre AP	MTH1WA Science - Locally Developed		SNC1L1
Mathematics - De-streamed	MTH1W1	French - De-streamed	FSF1D1
Mathematics - Locally Developed	MAT1L1	Français - FI - Academic	FIF1D1
English - De-streamed	ENL1W1	Geography - De-streamed	CGC1W1
English - Locally Developed	ENG1L1	Géographie - FI - De-streamed	CGC1WF
Science - De-streamed	SNC1W1	FNMI Languages - Open	LNOA01

Students along with parents/guardians will select three (3) electives. A fourth choice will be indicated on the Grade 9 verification form as a record for us in the event that a student's timetable does not allow for the first three choices.

Building the Entrepreneurial Mindset- Open	BEM101
Drama - Open	ADA101
Expressions of Aboriginal Culture - Open	NAC101
Éducation Physique - FI - Open	PPL10F
Health and Physical Education - Open	PPL101
Music - Open	AMI101
Music - Guitar - Open	AMG101
Music - Strings - Open	AMS101
Technology and the Skilled Trades - Open	TAS101
Visual Arts - Onen	AVI101













HAMMARSKJOLD HIGH SCHOOL

A TRADITION OF EXCELLENCE

Hammarskjold offers a full range of secondary programs to address the needs of all career pathways and post secondary destinations. Whether your destination is university, college, apprenticeship or work, you will find a selection of courses to meet your needs. Hammarskjold offers a comprehensive and diverse Fine Arts program. Hammarskjold is also fully equipped with new technology including Smartboards and WiFi throughout the school.

Hammarskjold's Advanced Placement courses are available in English and French Immersion and may qualify for university recognition. Our broad-based technology department offers college and workplace courses in four different areas. As Lakehead Public Schools French Immersion high school, students are able to earn their certification in French Immersion by completing 10 credits from a number of courses available in French.

Our innovative and exciting Specialist High Skills Major Programs in two areas include: Construction and Justice, Community Safety and Emergency Services. These programs allow students to concentrate their studies on credit bundles made up of sector-specific courses.

A broad spectrum of support programs is offered to our students. Our Breakfast Club, offered daily, is supported by the Red Cross and Breakfast Canada. Recognizing that personal health is vital to student success, we have a partnership with the Thunder Bay District Health Unit to serve the health needs of our students. Hammarskjold is indeed an inclusive high school with a wide range of programs including the Hearing Impaired Program, Pre-Workplace Program (PWP) and a Special Needs Class designed for students with developmental disabilities.

Hammarskjold has active student leadership. Students engage in many activities including leadership development for Grade 9 and Grade 10 students held at the Kingfisher Lake Outdoor Education Centre. Furthermore, Student Council members actively support community activities and a wide range of co-curricular opportunities, particularly in the area of clubs and athletics. Other groups include, but are not limited to, Yearbook, Natural Helpers, Hammbassadors, Gender & Sexuality Alliance (GSA) and STEM.

Hammarskjold students participate in a variety of sports at all levels: cross-country running, football, wrestling, track and field, golf, volleyball, basketball, biking, soccer, badminton, tennis, curling and more. Hammarskjold is proud to compete in all SSSAA athletic activities.

SPECIALIST HIGH SKILLS MAJORS

Senior students at Hammarskjold have the option of selecting a Specialist High Skills Major focus in two areas:

- Construction
- Justice, Community Safety and Emergency Services

Students who achieve a "bundle" of Grade 11 and 12 credits for a university, college, apprenticeship, or workplace pathway leave our school with sector recognized certifications and training as well as experiential learning within the selected sector. Experiential learning through a cooperative education opportunity enables students to refine, extend, apply, and practice the sector specific knowledge and skills acquired in the bundle of credits.

Students who successfully complete all requirements receive the Specialist High Skills Major designation on their Ontario Secondary School diploma.



Facta non Verba
Deeds not Words



FRENCH IMMERSION & ADVANCED PLACEMENT



French Immersion

Hammarskjold High School offers a French Immersion Diploma to students wishing to continue their study of the French language. To obtain the Diploma, students are required to take ten credits with French as the language of instruction. Four of these credits must be French Immersion language credits. The French Immersion program offers compulsory courses in French, including:

Geography of Canada | Grade 9; Healthy Active Living Education | Grade 9; Civics | Grade 10; Career Studies | Grade 10; and Canadian History since WWI | Grade 10.

For the other French credits, students choose additional courses from the following:

Food and Nutrition | HFN2OF; Cooperative Education | DC030F; Healthy Active Living Education | PPL20F; Food and Culture | HFC3MF; and Introduction to Anthropology, Sociology, and Psychology | HSP3UF. Additional French credits may be available online.

The variety of course offerings and full immersion experiences provide students with ample opportunities to enhance and refine their oral and written French language skills through structured and unstructured daily interaction. In addition, students will expand their knowledge of the language through the study of francophone culture and literature.

By the end of the four year program, students will participate easily in conversations and discussions, will be able to take courses at the college or university level in which French is the language of instruction, and will be able to accept employment where French is the working language.

Hammarskjold is proud to be a partner in the Centre DELF-DALF du Nord Ouest Ontario (Accredited Testing Centre) providing the opportunity for our Grade 12 students, upon successful completion of the DELF scolaire test, to obtain an internationally-recognized DELF certificate.

Exchange programs through ISE Ontario are available to further enhance language proficiency skills. For details, visit <u>iseontario.on.ca</u>

Advanced Placement

Hammarskjold High School is pleased to offer students Advanced



Placement courses at the senior level. Advanced Placement is a cooperative educational partnership between the high school and post secondary institutions. Advanced Placement provides students with an enriched learning experience by enhancing the depth and/or breadth of additional academic content as identified by post secondary institutions. Successful completion of the external AP examination(s) may exempt students from certain university courses. AP courses offered at Hammarskjold include Grade 11 English and Grade 12 English, and Grade 12 French. Students may also choose to challenge an AP exam in any subject area offered by the AP College Board. This can be facilitated through the school's AP coordinator.

Pre-Advanced Placement

Grade 10 students considering AP subjects at the senior level begin preparing and challenging themselves in the methods of AP skills development in academic English and French.

Final evaluation is based upon the successful completion of subject specific Ontario curriculum expectations. Enrichment opportunities within these subject areas allow students to challenge themselves and determine whether they wish to further pursue AP opportunities.



SELECTION & PLANNING

If you started Grade 9 in Fall 2024 and after

If you started Grade 9 in 2024 or in later years, you need the following to get your OSSD. Notice that you need 17 compulsory credits, including one credit in the STEM related course group.

Compulsory Credits

You need the following 17 compulsory credits to get your OSSD:

4 credits in English (1 credit per grade)

3 credits in mathematics (Grade 9, Grade 10 and 1 credit in Grade 11 or 12) 2 credits in science

1 credit in technological education (Grade 9 or Grade 10)

1 credit in Canadian history (Grade 10)

1 credit in Canadian geography (Grade 9)

1 credit in the arts

1 credit in health and physical education

1 credit in French as a second language or Native language

0.5 credit in career studies

0.5 credit in civics and citizenship

1 credit from the STEM-related course group

The following apply to compulsory credit selections.

- You can use the Grade 11 English: Understanding Contemporary First Nations, Métis and Inuit Voices course to meet the Grade 11 English compulsory credit requirement.
- You can use the Grade 9 Expressions of First Nations, Métis, and Inuit Cultures course to meet the compulsory credit requirement in the arts.

STEM-related course group

Of the 17 compulsory credits, you must complete 1 from the following group:

- business studies
- computer studies
- cooperative education
- mathematics (in addition to the 3 compulsory credits currently required)
- science (in addition to the 2 compulsory credits currently required)
- technological education (in addition to the 1 compulsory credit required)

Optional credits

You must earn 13 optional credits by successfully completing courses from your school's program and course calendar.

Optional credits may include up to 4 credits earned through approved dual credit programs.

Additional Requirements:

- 40 hours of community involvement activities
- Ontario Secondary School Literacy Requirement (OSSLT or OSSLC)
- Financial Literacy Requirement (starting for students who begin Grade 9 in 2026).
- 2 online credits (which make up any of the of the compulsory or optional credits). Students can opt out with parental permission. Contact your school guidance department to discuss opting out.

If you started Grade 9 in or before Fall 2023

If you started Grade 9 in 2023 or earlier, you need the following to get your OSSD. Notice that you need 18 compulsory credits and follow the Group 1, 2 and 3 lists.

Compulsory Credits

You need the following 18 compulsory credits to get your OSSD:

4 credits in English (1 credit per grade)

3 credits in mathematics (at least 1 credit in Grade 11 or 12)

3 credits for group 1, 2 and 3 courses (1 credit in each group)

2 credits in science

1 credit in Canadian history (Grade 10)

1 credit in Canadian geography (Grade 9)

1 credit in the arts

1 credit in health and physical education

1 credit in French as a second language or Native Language

0.5 credit in career studies

0.5 credit in civics and citizenship

The following also apply to compulsory credit selections.

- You can use the Grade 11 English: Understanding Contemporary First Nations, Métis and Inuit Voices course to meet the Grade 11 English compulsory credit requirement.
- You can use the Grade 9 Expressions of First Nations, Métis, and Inuit Cultures course to meet the compulsory credit requirement in the arts.

Group 1, 2 and 3 compulsory credits

Of the 18 compulsory credits, you must complete 1 from each of the following groups:

Group 1: English (including the Ontario Secondary School Literacy Course) or French as a second language, Native languages, First Nations, Métis, and Inuit studies, classical studies and international languages, social sciences and the humanities, Canadian and world studies, guidance and career education, cooperative education, American Sign Language as a second language

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

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

The following conditions apply to selections from the above three groups: A maximum of 2 credits in French as a second language may count as additional compulsory credits, 1 credit from Group 1, and 1 credit from either Group 2 or 3. A maximum of 2 credits in cooperative education may count as additional compulsory credits, selected from any of Groups 1, 2, or 3.

Optional credits

You must earn 12 optional credits by successfully completing courses from your school's program and course calendar.

Optional credits may include up to 4 credits earned through approved dual credit programs.

Additional Requirements:

- 40 hours of community involvement activities
- Ontario Secondary School Literacy Requirement (OSSLT or OSSLC)

Your Individual Pathways Plan (IPP)

All Ontario secondary students will create their own Individual Pathways Plan (IPP). This is the primary planning tool that you will use as you move through school to your initial post-secondary destination.

Your Individual Pathways Plan (IPP) will help you find the answers.

Everything you learn about courses, careers and pathways will be stored in your IPP. You will be able to access all this valuable information as you begin planning your life after high school.

A career is your path through life.

In high school, you will have to make decisions about education, learning, different jobs, work (paid and unpaid), family life, friendships, community involvement and leisure activities.

Career development requires you to understand who you are and what opportunities you have in both the world and the workplace, so that you can begin to make decisions about your future. Career development involves understanding your own strengths and interests, goal-setting, decision-making and awareness of opportunities.

Jobs in the future will belong to people with skills, attitudes and behaviours that include academic abilities, personal management skills and teamwork strategies.

You will need to have good work habits and the ability to make sound decisions, solve problems, plan effectively, work independently, communicate well, do research, evaluate yourself realistically, and explore new educational and career opportunities.

Student Services Guidance Counsellors will be a valuable resource for searches, course selection, career exploration, support and so much more. Talk to your counsellor about your ideas, goals, and dreams.

Explore Options, Goals & Plans

Use this walkthrough to learn about Explore Options and Goals & Plans. These activities help students open their eyes to the many different futures available to them. Once they've been introduced to the wide range of careers, have delved into self-knowledge, and have defined a goal, Xello prompts them to come full circle and narrow the pathways required to reach those future goals.

Explore Options

Whether you want to start your journey by exploring careers, schools, or majors, you can start from Explore Options. Let's start with Careers.

Explore Careers

- Select Explore Options in the top menu.
- Select Careers and you'll see your top 20 best-matched careers. By default, careers are sorted by the strength of your match to the career: Excellent, Good, Fair, or Poor.
- Browse through the list and select View More to see another 20 careers. You can keep expanding the list.



TIP: Explore the dynamic filters by clicking More Filters. You can narrow your list based on factors like earnings, related clusters, and job outlook.

Deep Dive on a Career

Xello includes hundreds of career profiles that are accessible and engaging. To view a career profile, select a career that interests you. Select *Find Out Why* to see how the answers you gave in your assessments contributed to your match score.

Select *Save* next to the heart icon to save a favourite career, indicate how you feel about it, and explore further with investigative prompts.

Make your way to the bottom of the career profile page, scrolling past the job description, earnings, and down to the education and training; you'll see a list of links under Related Programs. Choose one to take you to Explore Programs.



TIP: Saving your options will help you experience a curated Xello journey as activities are specially tuned to your interests and favourites. You can visit your saved options from any page by clicking the heart icon in the top menu bar.

Explore Programs

Once on the Explore Programs page, the link you chose from the career profile will be applied as a filter to the program results. Apply other filters to further narrow results.

Time to Explore!

Choose a program to bring up its profile. On each program you will see details such as admission requirements, costs, similar programs, at this and other schools. From the right of the profile, select *Save* to record it to your favourites.



TIP: You can access Programs and Schools from the top of any page.

Explore Schools

To explore more about the specific school, select the school name under the section titled *Offered By*. From here you can learn about cost, enrollment, programs, campus housing, similar schools, and even the local weather, and an interactive campus map. Select *Save* to record it to your favourites.

Xello works hard to prompt you to discover a path that parallels your skills and interests, but sometimes your best inspiration will be stumbled upon by surprise. So if you'd like to cut loose and browse all careers, schools, and programs, select the *Explore Options* link again and select the appropriate section to begin exploring, applying filters, and saving your favourites.

Goals & Plans

Once you've explored your career, program, and school options, bring your knowledge full circle and build a plan to connect all the dots. From the navigation bar at the top of the page, select *Goals* & *Plans* and then *Create Plan*.

Choose one of the three starting points: career, school, or program; and give your plan a name. Select *Next* and use your saved options to choose a path in your future.

Once completed, you can personalize your plan by adding comments and media to your storyboard. Create multiple plans and compare them on the Goals & Plans page.



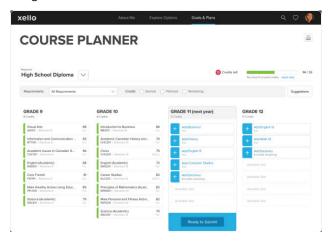
Stay up-to-date on everything that's happening at school with Edsby. Edsby is an online learning management system that connects students, parents and teachers. Login to Edsby to stay up to date on classwork, grades and learning resources.

Edsby will even remind you when something is due - whether it is to hand in an assignment, or to go to soccer practice.

Use your Office ID to login to Edsby at lakehead.edsby.com or download the Edsby app from your app store.

XELLO

Xello is the web-based planner you will use to manage your IPP. It is also the course selection tool that will help you set up your high school courses in alignment with your graduation requirements and career goals.



Need2Know

Current Grade 9s

For Grade 10, you will have five compulsory courses plus three electives.

Current Grade 10s

You will take an English and a Math course, plus six other elective credits. You should be considering your Groups 1, 2, and 3, as well as prerequisites you may be required to take in Grade 12 for Apprenticeship, College or University programs after high school.

Current Grade 11s

You are choosing your one English and at least five other courses. You must ensure you will graduate with a minimum of 30 credits including 18 compulsory credits.

If you have attempted the Ontario Secondary School Literacy Test at least twice and have been unsuccessful, you should include OLC40 as a course choice.

Please note: If you received 50% in a course, you should talk to your subject teacher about the appropriate next step.

Students wishing to attend college or university are reminded that they must meet specific entrance requirements:

University – at least six (6) Grade 12 "U" or "M" courses and in many cases a designated overall average (70% for Lakehead University).

Students must also meet courses prerequisites for certain post secondary programs.

For a comprehensive list of Universities and programs, as well as prerequisites and admissions requirements, visit: www.ontariouniversitiesinfo.ca

College - at least Grade 12, College English. Specific senior mathematics courses are also required for technology programs.

To explore college programs and admissions requirements, visit: www.ontariocolleges.ca

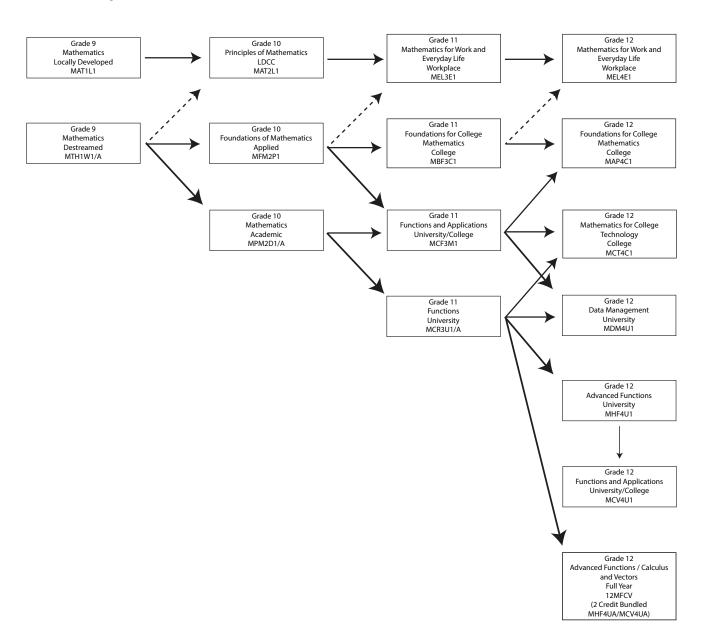
For more information on trades, visit: www.skilledtrades.ca

General information: www.osca.ca



Mathematics

Prerequisite Chart





COURSE LISTING

The Arts Course Descriptions: p.14-15		Code	Prerequisite
Drama		0000	
Drama - Open		ADA201	
Drama - U/C		ADA3M1	ADA101 or 201
Drama - U/C		ADA4M1	ADA3M1
Music			
Music - Open	Band*	AMI201	
Music - Open	Guitar	AMG201	
Music - Open	Guitar - No previous experience required	AMG2OR	
Music - Open	Strings*	AMS201	
Music - Open	Vocal/Coral	AMV201	
Music - U/C	Band	AMI3M1	AMI201
Music - Open	Guitar	AMG301	AMG201 or 20R
Music - U/C	Repertoire	AMR3M1	AMI201 or AMS201
Music - U/C	Strings	AMS3M1	AMS201
Music - U/C	Vocal/Coral	AMV3M1	
Music - U/C	Band	AMI4M1	AMI3M1
Music - U/C	Guitar	AMG4M1	AMG301
Music U/C	Repertoire	AMR3M1	AMI201 or AMS201
Music - U/C	Repertoire	AMR4M1	AMS3M1 or AMI3M1 or AMR3M1
Music - U/C	Strings	AMS4M1	AMS3M1
Music - U/C	Vocal/Coral	AMV4M1	
Visual Arts			
Visual Arts		AVI201	
Visual Arts		AVI3M1	AVI101 or AVI201
Visual Arts		AVI4M1	AVI3M1 or 301
Business Studie	as a		
Course Descriptions: p.15 Accounting	55	Code	Prerequisite
Financial Accountin	g Fundamentals - U/C - eLearning	BAF3ME	
Business			
Launching and Learr	ning a Business - Open	BEP201	
International Business			
International Busine	ss Fundamentals - U/C In class or eLearning	BBB4M1/E	
Marketing			
	ervices, and Events - College In class or eLearning	BMI3C1/E	
Business Leadership			
Business Leadership	Management - U/C eLearning	вон4ме	

^{*} Previous musical experience highly recommended.

Canadian and World Studies

Course Descriptions: p.15-16 Code Prerequisite

Civics (Politics)

Civics & Citizenship - Open	½ Credit	CHV205	
Civics & Citizenship - FI - Open	½ Credit	CHV2OF	

Geography

The Environment and Resource Management - U/C	eLearning CGR4ME	See Page 5
	8 8 8 8	

History

Canadian History since World War I - Academic	CHC2D1	
Canadian History since World War I - FI - Academic	CHC2DF	
Canadian History since World War I - Applied	CHC2P1	
First Nations, Métis, and Inuit Peoples in Canada - Open	NAC201	
World History to the End of the Fifteenth Century - U/C	CHW3M1	CHC2D1 or 2P1
World History since the Fifteenth Century - U	CHY4U1	See Page 16
Law		
Understanding Canadian Law - U/C	CLU3M1	CHC2D1 or 2P1
Canadian and International Law - University In class or eLearning	CLN4U1/E	See Page 16
Legal Studies - College	CLN4C1	CHV205

Computer Studies

Course Descriptions: p.16	Code	Prerequisite
Introduction to Computer Science - University	ICS3U1	
Introduction to Computer Programming - College	ICS3C1	
Computer Science - University	ICS4U1	ICS3U1
Computer Programming - College	ICS4C1	ICS3C1

English

Course Descriptions: p.17-18	Code	Prerequisite
Compulsory English - Academic	ENG2D1	ENL1W1
Compulsory English - Applied	ENG2P1	ENL1W1
Compulsory English - LDCC	ENG2L1	ENG1L1
Compulsory English: Understanding Contemporary First Nations, Métis and Inuit Voices - University	NBE3U1*	ENG2D1
English - University (Advanced Placement)	ENG3UA	ENG2D1
Compulsory English: Understanding Contemporary First Nations, Métis and Inuit Voices - College	NBE3C1*	ENG2D1 or 2P1
Compulsory English: Understanding Contemporary First Nations, Métis and Inuit Voices - Workplace	NBE3E1*	ENG2P1 or 2L1
Compulsory English - University In class or eLearning	ENG4U1/E	ENG3U1, 3UA or NBE3U1

English - University	Advanced Placement	ENG4UA	ENG3U1 or 3UA or NBE3U1
Compulsory English - College		ENG4C1	ENG3C1 or 3U1/A
,,			or NBE3C1 or 3U1
Compulsory English - Workplace		ENG4E1	ENG3E1 or 3C1
,			or NBE3E1
The Writer's Craft - University	eLearning	EWC4UE	ENG3U1 or 3UA
•	g .		or NBE3U1
Ontario Secondary School Literacy Cou	rse - Open	0LC401	See Page 18
First Nations, Métis, and Course Descriptions: p.18	Inuit Languages	Code	Prerequisite
	-	I NOAO1	
FNMI Languages: Ojibwe, Level 1 - Oper		LNOA01	C D 10
FNMI Languages: Ojibwe, Level 2 - Oper	n	LNOB01	See Page 18
First Nations Mátic and	Inuit Studios		
First Nations, Métis, and Course Descriptions: p.18	Illuit Studies	Code	Proroquisito
<u> </u>			Prerequisite
Expressions of First Nations, Métis, and	•	NAC101	
First Nations, Métis, and Inuit in Canad	·	NAC201	=N4454
English: Understanding Contemporary I	-irst Nations,	NBE3U1*	ENG2D1
Métis, and Inuit Voices - University			
English: Understanding Contemporary I	First Nations,	NBE3C1*	ENG2P1
Métis, and Inuit Voices - College			
English: Understanding Contemporary I	First Nations,	NBE3E1*	ENG2L1
Métis, and Inuit Voices - Workplace			
French as a Second Lang	ruage		
Course Descriptions: p.18-19	,	Code	Prerequisite
Core		0000	Troroquioto
Core French - Academic		FSF2D1	FSF1D1 or 1P1
Core French - University		FSF3U1	FSF2D1
Core French - University		FSF4U1	FSF3U1
French Immersion		101701	101001
French Immersion - Academic		FIF2D1	FIF1D1
French Immersion - Academic French Immersion - University		FIF3U1	FIF2D1
French Immersion - University	Advanced Disservent	FIF4U1	FIF3U1
French Immersion - University	Advanced Placement	FIF4UA	FIF3U1

 $^{^{\}star}$ Credit may be used to meet the Grade 11 English, Compulsory credit requirement

Guidance and Career Education

Course Descriptions: p.19		Code	Prerequisite
Career Studies - Open	½ Credit	GLC205	
Career Studies - FI - Open	½ Credit	GLC20F	
Creating Opportunities through Cooperative Education- Open	2 Credit	DC0302	
Creating Opportunities through Cooperative Education - FI - Open	2 Credit	DC030F	
Cooperative Education: Navigating the Workplace - Open	2 Credit	GLN40C	
Cooperative Education - FI - Open	2 Credit	GLN40F	
Cooperative Education - Army Reserve - Open	2 Credit	COP4XA	See Page 27
Cooperative Education - Navy Reserve - Open	2 Credit	COP4XN	See Page 27
-Summer Program, see Guidance.			
Creating Opportunities Through Cooperative Education: First Cooperative Education Experience Focused Apprenticeship Skills Training (OYAP-FAST) - Open	2 Credits	COP3F2	See p.27 and Student Services
Creating Opportunities Through Cooperative Education: First Cooperative Education Experience Focused Apprenticeship Skills Training (OYAP-FAST) - Open	4 Credits	COP3F4	See p.27 and Student Services
Creating Opportunities Through Cooperative Education: Second Cooperative Education Experience Focused Apprenticeship Skills Training (OYAP-FAST) - Open	2 Credits	COP4F2	See p.27 and Student Services
Creating Opportunities Through Cooperative Education: Second Cooperative Education Experience Focused Apprenticeship Skills Training (OYAP-FAST) - Open	4 Credits	COP4F4	See p.27 and Student Services

Health and Physical Education

Course Descriptions: p.19-20		Code	Prerequisite
Healthy Active Living Education - Open		PPL201	
Healthy Active Living Education (French Immersion) 0	pen	PPL20F	
Healthy Active Living Education - Open	In class or eLearning	PPL301/E	
Personal and Fitness Activities - Open		PAF301	
Healthy Active Living Education - Open		PPL401	
Introductory Kinesiology - University	In class or eLearning	PSK4U1/E	See Page 20
Personal and Fitness Activities - Open		PAF401	
Health for Life - College	eLearning	PPZ3CE	

Mathematics

Mathematics Course Descriptions: p.20	Code	Prerequisite
Principles of Mathematics - Academic	MPM2D1	MTH1W1/1WA
Principles of Mathematics - Academic (Pre-AP)	MPM2DA	MTH1W1/1WA
Foundations of Mathematics - Applied	MFM2P1	MTH1W1/1WA
Mathematics - LDCC	MAT2L1	MAT1L1 or MTH1W1/1WA
Functions - University	MCR3U1	MPM2D1 or MPM2DA
Functions - University (Pre-AP)	MCR3UA	MPM2D1 or MPM2DA
Functions and Applications - U/C	MCF3M1	MFM2P1 or MPM2D1 or MPM2DA
Functions for College Mathematics - College	MBF3C1	MFM2P1 or MPM2D1 or MPM2DA
Math for Work and Everyday Life - Workplace	MEL3E1	MAT2L1 or MFM2P1 or MPM2D1
Advanced Functions - University	MHF4U1	MCR3U1/A or MCT4C1
Calculus and Vectors - University In class or eLearning	MCV4U1	MHF4U1 (or concurrently)

Concurrent 2-credit offering for AP Mathematics Students - Full Year

Advanced Functions - University

Calculus and Vectors - University (AP)

Data Management - University		MDM4U1	MCR3U1 or MCF3M1 or MCR3UA
Foundations for College Mathematics - Co	ollege	MAP4C1	MBF3C1 or MCF3M1 or MCR3UA
Math for Everyday Life - Workplace		MEL4E1	MEL3E1
Science		Codo	Duamanulaita
Course Descriptions: p.21		Code	Prerequisite
Science - Academic		SNC2D1	SNC1W1
Science - Applied		SNC2P1	SNC1W1
Biology - University		SBI3U1	SNC2D1
Biology - College		SBI3C1	SNC2D1 or 2P1
Biology - University		SBI4U1	SBI3U1
Chemistry - University	In class or eLearning	SCH3U1/E	SNC2D1
Chemistry - University	In class or eLearning	SCH4U1/E	SCH3U1
Chemistry - College	In class or eLearning	SCH4C1/E	SNC2D1 or 2P1
Physics - University		SPH3U1	SNC2D1
Physics - University	In class or eLearning	SPH4U1/E	SPH3U1
Physics - College	eLearning	SPH4C1	SNC2P1, 2D1
Environmental Science - Workplace		SVN3E1	SNC1D1, 1P1, 1L1 or 2
ourse Descriptions: p.21-22 amily Studies		Code	Prerequisite
Food and Nutrition - Open		HFN201	
Food and Nutrition - FI - Open		HFN20F	
Food and Culture - FI - University/College		HFC3MF	
Food and Culture - Workplace		HFC3E1	
Raising Healthy Children - Open	In class or eLearning	HPC301/E	
Nutrition and Health - University	In class or eLearning	HFA4U1/E	See Page 23
Nutrition and Health - College		HFA4C1	See Page 23
Families in Canada - University	elearning	HHS4UE	See Page 23
Human Development Throughout the Life	espan - U/C elearning	HHG4ME	See Page 22
eneral Social Sciences			
Introduction to Anthropology, Sociology an	d Psychology - University	HSP3U1	ENG2D1 or
		CHC2D1	
Introduction to Anthropology, Sociology an	d Psychology - College	HSP3C1	ENG2P1 or
		CHC2P1	
Introduction to Anthropology, Sociology an	d Psychology - FI - University	HSP3UF	ENG2D1 or CHC2D1
			(FIF2D1 Recommended
Challenge and Change in Society - Universit	y In class or eLearning	HSB4U1/E	See Page 23

Students are reminded that it may be difficult or impossible to change a course once school starts in September.

Course selections made in February for the following year are the basis upon which classes are structured and staff is assigned. After staffing and the school's master timetable are established, subsequent changes in a student's program are possible but very much restricted, and are considered if timetable and class size permit.

Where enrolment is insufficient, a course may be canceled.

Technological Education

Course Descriptions: p.22-24	Code	Prerequisite
Communications Technology		
Communications Technology	TGJ201	
Communications Tech: Print and Graphic Communications - U/C - Yearbook	TGG3M1	
Communications Tech: Print and Graphic Communications - U/C - Yearbook	TGG4M1	TGG3M1
Construction Technology		
Construction Technology - Open	TCJ201	
Construction Engineering Technology - College	TCJ3C2 - 2 Credit	Course
Construction Technology - Workplace	TCJ3E2 - 2 Credit	Course
Custom Woodworking - Workplace	TWJ3E1	
Construction Engineering Technology - College	TCJ4C2 - 2 Credit	Course TCJ3C2
Construction Technology - Workplace	TCJ4E2 - 2 Credit	Course TCJ3E2
Custom Woodworking - Workplace	TWJ4E1	TWJ3E1

^{*} Construction Specialist High Skills Major Program - See your Guidance Counsellor for more information

Hairstyling and Aesthetics

Hairstyling and Aesthetics - Open		TXJ201	
Hairstyling and Aesthetics - Workplace		TXJ3E1	
Hairstyling and Aesthetics - Workplace		TXJ4E1	TXJ3E1
Manufacturing Technology			
Manufacturing Technology - Open	Metal Working	TMJ201	
Manufacturing Technology - College	Metal Working	TMJ3C1	
Manufacturing Technology - Workplace	Metal Working	TMJ3E1	
Manufacturing Technology - College	Metal Working	TMJ4C1	TMJ3C1
Manufacturing Technology - Workplace	Metal Working	TMJ4E1	TMJ3E1
Transportation Technology			
Transportation Technology - Open		TTJ201	
Transportation Technology: Auto Service - College		TTA3C1	
Transportation Technology: Auto Service - College		TTA3C2 - 2 Credit C	ourse
Transportation Technology: Auto Service - College		TTA4C1	

Innovative, exciting and flexible opportunities are available that allow students to earn credits towards their diploma in many unique and varying environments. Whether online, in a career setting, post-secondary institution, or other educational facility, students participating in these programs work hands-on and build the skills and knowledge necessary to ensure their successful transition to their post secondary career of choice. Many of these programs also provide free certifications, recognized training, or reach ahead experiences to help students further focus their career pathway. All students can benefit from participation in these equal access programs. Students select courses online using Xello during February.

See the Senior Specialist: Focus section of this calendar p. 25-27 for more information about how a senior focus of study might just be what you are looking for.

Additional information is available at Student Services. Speak with your guidance counsellor today!

SENIOR SPECIALIST FOCUS - GRADES 11 & 12

Information and application procedures are available at Student Services.

Cooperative Education System Programs

Army Reserve	Sem 2	2 Credit	COP4XA	See Page 27	
Naval Reserve	Summer	2 Credit	COP4XN	See Page 27	
Aviation Technology	TBD	4 Credit	COP4XV		

Ontario Youth Apprenticeship Program (OYAP) - Application required when cooperative education placement specific to apprenticeship.

Dual Credit Opportunities (School-College-Work Initiative) See Page 30

See Page 30-31 for more information

Designed for Senior Students who will be headed for college. Dual credit opportunities are different for each secondary school. College Now! Courses are offered on specific afternoons.

Specialist High Skills Major

Arts and Culture	Westgate	8 Credit Bundle	SHMART	See Page 28
Aviation and Aerospace	Westgate	9 Credit Bundle	SHMAVA	See Page 28
Business	Westgate	9 Credit Bundle	SHMBUS	See Page 28
Hospitality & Tourism	Westgate	8 Credit Bundle	SHMHTO	See Page 28
Manufacturing	Westgate	9 Credit Bundle	SHMMAN	See Page 28
Transportation Services	Westgate	9 Credit Bundle	SHMTTA	See Page 28
Construction	Westgate	9 Credit Bundle	SHMCON	See Page 28
Construction	Hammarskjold	10 Credit Bundle	SHMTCJ	See Page 28
Justice, Community Safety,	Hammarskjold	8 Credit Bundle	SHMJCE	See Page 28
and Emergency Services				
Manufacturing	Superior	9 Credit Bundle	SHMTMW	See Page 28
Health and Wellness	Superior	9 Credit Bundle	SHMTPJ	See Page 28

eLearning at LPS - 2025-2026

Students may earn Ontario high school credits online through the Lakehead District School Board eLearning Program. Students taking an e-learning course will receive their instruction, assignments and tests online at the eLearning site www.lakeheadschools.ca/elearning/. Participating students will be given face-to-face initial training on how to use the site and meet their teacher at the start of the semester. These courses meet all curriculum expectations and are taught by fully qualified teachers in one of our three high schools.

- Enjoy the flexibility of an eLearning online course
- Dedicated eLearning teacher contact, support and assistance, including a help desk.
- Computer access available
- Qualify by enrolling in at least two per semester other day school courses.

Please check with Student Services to confirm the semester when courses will be offered.

Business Leadership Management - U/C	ВОН4МЕ	English - University	ENG4UE
Challenge and Change - University	HSB4UE	Canadian & International Law - University	CLN4UE
The Writer's Craft - University	EWC4UE	Introductory Kinesiology - University	PSK4UE
Calculus and Vectors - University	MCV4UE	Chemistry - College	SCH4CE
Physics - College	SPH4CE	Marketing: Goods, Services, Events - College	ВМІЗСЕ
Chemistry - University	SCH3UE	Raising Healthy Children - Open	HPC30E
Chemistry - University	SCH4UE	International Business Fundamentals - U/C	BBB4ME
Financial Accounting Fundamentals - U/C	BAF3ME	Health for Life - College	PPZ3CE
Physics - University	SPH4UE	Healthy Active Living - Open	PPL30E
Nutrition & Health - University	HFA4UE	Families In Canada - University	HHS4UE
Human Development Throughout the Lifespan - U/C	HHG4ME		

COURSE DESCRIPTIONS

THE ARTS

Drama

Drama ADA201 Grade 10 Open

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

Prerequisite: None

Drama ADA3M1
Grade 11 University/College

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: ADA101 or ADA201

Drama ADA4M1
Grade 12 University/College

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: ADA3M1

Music

Music - Band AMI20 Grade 10 Open

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

Prerequisite: None*

Music - Vocal/Choral AMV201 Grade 10 Open

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

Prerequisite: None

Music - Guitar AMG201 Grade 10 Open

Music - Guitar

Grade 10

Open

This course is for Grade 10 students who have not taken Grade 9 Guitar.

Music - Strings AMS201 Grade 10 Open

Prerequisite: None*

Music - Band AMI3M1
Grade 11 University/College

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: AMI201

Music - Vocal/Choral AMV3M1
Grade 11 University/College

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 process when reflecting on, responding to and analyzing live and recorded performances. Students will consider the function of music in society and the impact of music on individuals and communities. They will explore how to apply skills developed in music to their life and careers. The focus of this course is contemporary music.

Prerequisite: Any Grade 9 or 10 Music course *For Gr.11-12 vocal this year-waive the pre requisite

Music - Repertoire * AMR3M1
Grade 11 University/College

Prerequisite: AMI201 or AMS201

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

Prerequisite: AMI201 or AMS201

*This course will be offered after school from 3:40 p.m. - 5:10 p.m. two days per week for the full school year, and is in addition to your regular course selections. Please see Mr. Pepe or Mrs. DeLeon to register for this course

Music - Strings AMS301
Grade 11 University/College

Music - Guitar AMG301 Grade 11 Open

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. Students should have guitar proficiency at the Grade 10 level.

Prerequisite: AMG101 or AMG201

Music - Vocal/Choral AMV4M1
Grade 12 University/College

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, and will respond with insight to live and record performances. Students will embrace their understanding of the function of music in society and the impact of music on themselves and various communities and cultures. Students will analyze how to apply skills developed in music to their life and careers. The focus of this course is contemporary music.

Prerequisite: Any Grade 11 Music course

Music - Band AMI4M1 Grade 12 University/College

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: AMI3M1

Music - Guitar AMG4M1 University/College Grade 12

Prerequisite: AMG3M1

Music - Strings AMS4M1 University/College Grade 12

Prerequisite: AMS3M1

Music - Repertoire * AMR3M1/AMR4M1 Grade 11/12 University/College

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

Prerequisite: AMI201 or AMS201 or AMI3M1 or AMS3M1 or AMR3M1

* This course will be offered after school from 3:40 p.m. - 5:10 p.m. two days per week for the full school year, and is in addition to your regular course selections. Please see Mr. Pepe or Mrs. DeLeon to register for this course

Visual Arts

Visual Arts AVI201 Grade 10 Open

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

Prerequisite: None

Visual Arts AVI3M1 University/College

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: AVI101 or AVI201

Visual Arts AVI4M1 Grade 12 University/College

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: AVI3M1 or 301

BUSINESS STUDIES

Accounting

Financial Accounting Fundamentals RAF3MF Grade 11 University/College

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 Prerequisite: None

Business

Launching and Leading a Business RFP201 Grade 10

Onen

This course introduces students to the world of business and what is required to be successful, ethical, and responsible in today's economy. Students will develop the knowledge and skills needed to be an entrepreneur who knows how to respond to local and global market opportunities. Throughout the course, students will explore and understand the responsibility of managing different functions of a business. This includes accounting, marketing, information and communication technology, financial management, human resources, and production. Prerequisite: None

Marketing

BMI3C1/E Marketing: Goods, Services, Events Grade 11 - In class or eLearning College

This course introduces the fundamental concepts of 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

International Business

International Business Fundamentals BBB4M1/E Grade 12 - In class or eLearning University/College

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 post secondary programs in business, including international business, marketing, and management. Prerequisite: None

Business Leadership

Business Leadership Management BOH4ME Grade 12 - eLearning University/College

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

Civics (Politics)

Civics & Citizenship CHV205 Grade 10 0.5 Credit

This course explores rights and responsibilities associated with being an active citizen in a democratic society. Students will explore issues of civic importance such as healthy schools, community planning, environmental responsibility, and the influence of social media, while developing their understanding of the role of civic engagement and of political processes in the local, national, and/or global community. Students will apply the concepts of political

thinking and the political inquiry process to investigate, and express informed opinions about, a range of political issues and developments that are both of significance in today's world and of personal interest to them.

Prerequisite: None

Civics & Citizenship CHV20F
Grade 10 - 0.5 Credit - (French Immersion) Open

Eligibility: Open to all students

Geography

The Environment and Resource Management

CGR4ME

Grade 12 - eLearning University/College

This course investigates interactions between natural and human systems, with a particular emphasis on the impacts of human activity on ecosystems and natural processes. Students will use the geographic inquiry process, apply the concepts of geographic thinking, and employ a variety of spatial skills and technologies to analyse these impacts and propose ways of reducing them. In the course of their investigations, they will assess resource management and sustainability practices, as well as related government policies and international accords. They will also consider questions of individual responsibility and environmental stewardship as they explore ways of developing a more sustainable relationship with the environment. Prerequisite: Any university, university/college, or college preparation course in Canadian and world studies, English, or social sciences and humanities

History

Canadian History since World War I CHC2D1
Canadian History since World War I (French Immersion) CHC2DF
Grade 10

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

Prerequisite: None

Canadian History since World War I CHC2P1
Grade 10 Applied

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

Prerequisite: None

First Nations, Métis, and Inuit Peoples in Canada NAC201 Grade 10 Open

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

Prerequisite: None

World History to the End of the Fifteenth Century CHW3M1
Grade 11 University/College

This course explores the history of various societies and civilizations around the world, from earliest times to around 1500 CE. Students will investigate a range of factors that contributed to the rise, success, and decline of various ancient and pre-modern societies throughout the world and will examine life in and the cultural and political legacy of these societies. Students will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating social, political, and economic structures and historical forces at work in various societies and in different historical eras.

Prerequisite: CHC2P1 or 2D1

World History since the Fifteenth Century CHY4U1
Grade 12 University

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

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

Law

Understanding Canadian Law CLU3M1
Grade 11 University/College

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

Prerequisite: CHC2D1 or 2P1.

Canadian and International Law CLN4U1/E Grade 12 - In class or eLearning University

This course explores a range of contemporary legal issues and how they are addressed in both Canadian and international law. Students will develop an understanding of the principles of Canadian and international law and of issues related to human rights and freedoms, conflict resolution, and criminal, environmental, and workplace law, both in Canada and internationally. Students will apply the concepts of legal thinking and the legal studies inquiry process, and will develop legal reasoning skills, when investigating these and other issues in both Canadian and international contexts.

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

Legal StudiesCLN4C1Grade 12College

This course provides a foundation for students who wish to pursue a career that requires an understanding of law. Students will explore the importance of law, analysing contemporary legal issues and their relevance to daily life. They will investigate the requirements for various law-related careers as well as legal responsibilities in the workplace. Students will apply the concepts of legal thinking and the legal studies inquiry process to investigate their rights and responsibilities, legal processes and structures, and the role of law in a changing society. **Prerequisite: CHV205**

COMPUTER STUDIES

Intro to Computer Science ICS3U1
Grade 11 University

This course introduces students to computer science. Students will design 2D and 3D video games independently and as part of a team, using industry-standard game development tools and applying the software development life-cycle model. They will also design array algorithms and 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 emerging research in computer science, and global career trends in computer-related fields.

Prerequisite: None

Introduction to Computer Programming (Game Objects and Algorithms)

ICS3C1

Grade 11 College

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.

Prerequisite: None

Computer Science Grade 12

ICS4U1 University

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 analyze algorithms for effectiveness. They will investigate ethical issues in computing and further explore environmental issues, emerging technologies, and computer-related careers.

Prerequisite: ISC3U1

Computer Programming Grade 12

ICS4C1 College

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: ISC3C1

ENGLISH

Compulsory Courses

English ENG2D1 Grade 10 Academic

This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. Students will 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 or English: Contemporary Aboriginal Voices, Grade 11, University - NBE3U1.

Prerequisite: ENL1W1

English ENG2P1 Grade 10 **Applied**

This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. 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 or Contemporary Aboriginal Voices, Grade 11 college preparation course.

Prerequisite: ENL1W1

English ENG2L1 Grade 10 LDCC

In this course, students focus on extending their literacy and communication skills to prepare for success in their daily lives, in the workplace, in the English Grade 11 Workplace course, or in the English: Contemporary Aboriginal Voices, Grade 11 Workplace course. The course is organized into strands that extend listening and talking skills, reading and viewing skills, and writing skills. In all strands, the focus is on refining foundational literacy skills and on using language clearly and accurately in a variety of authentic contexts. Students build on their strategies and engage in the processes involved in talking, listening, reading, viewing, writing and thinking, and reflect regularly upon their growth in these areas.

Prerequisite: ENG1L1

English: Understanding Contemporary First Nation, Métis and Inuit Voices NBE3U1

This course explores themes, forms, and stylistic elements of a variety of literary, informational, graphic, oral, cultural, and media text forms emerging from First Nations, Métis, and Inuit cultures in Canada, and also examines the perspectives and influence of texts that relate to those cultures. In order to fully understand contemporary text forms and their themes of identity, relationship, and self-determination, sovereignty, or self-governance, students will analyse the changing use of text forms by Indigenous authors/creators from various periods and cultures in expressing ideas related to these themes. Students will also create oral, written, and media texts to explore their own ideas and understanding, focusing on the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. The course is intended to prepare students for the compulsory Grade 12 English university or college preparation course. *New: NBE3U1 now replaces the ENG3U1* Prerequisite: ENG2D1

English - Advanced Placement Grade 11

ENG3UA University This AP English Language and Composition course is designed to help students become skilled readers of prose written in a variety of rhetorical contexts and to become skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way language conventions and the resources of language contribute to effectiveness in writing. The course is intended to prepare students for the compulsory Grade 12 university or college prerequisite course. A high level of success on the AP English Language and Composition examination could qualify a student for a university credit. Prerequisite: ENG2D1

English: Understanding Contemporary First Nations, Métis, and Inuit Voices

NBE3C1 College

This course explores the themes, forms, and stylistic elements of literary, informational, graphic, oral, cultural, and media text forms emerging from First Nations, Métis, and Inuit cultures in Canada, and also looks at the perspectives and influences of texts that relate to those cultures. In order to understand contemporary text forms and their themes of identity, relationship, and self-determination, sovereignty, or self-governance, students will study the use of text forms by Indigenous authors/creators from other periods in expressing ideas related to these themes. Students will also create oral, written, and media texts to explore their own ideas and understanding, focusing on the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. The course is intended to prepare students for the compulsory Grade 12 English college preparation course.

Prerequisite: ENG2P1 or ENG2D1

English: Understanding Contemporary First Nations, Métis, and Inuit Voices

NBE3E1

Grade 11

Grade 11

Workplace

This course explores the themes, forms, and stylistic elements of literary, informational, graphic, oral, cultural, and media text forms emerging from First Nations, Métis, and Inuit cultures in Canada, as well as some texts that relate to those cultures. In order to better understanding contemporary texts, students will explore connections between traditional and contemporary text forms and cultural and community aspects of identity, relationships, and self-determination, sovereignty, or self-governance. Students will also create oral, written, and media texts to explore their own ideas and understanding, focusing on the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. The course is intended to prepare students for the compulsory Grade 12 English college preparation course.

Prerequisite: ENG2P1 or ENG2L1

English - Advanced Placement ENG4UA Grade 12 University

The AP English Literature and Composition course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readings. As they read, students will consider structure, style and themes, as well as the use of figurative language, imagery, symbolism, and tone. The course is intended to prepare students for success in the AP examination and for university. college or the workplace. A high level of success on the Literature and Composition AP examination could qualify the student for university credit.

Prerequisite: ENG3U1/A or NBE3U1

English

ENG4U1/E Grade 12 - In class or eLearning University

This course emphasizes 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.

Prerequisite: ENG3U1/A or NBE3U1

ENG4C1 English Grade 12 College

This course emphasizes consolidation of the 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.

Prerequisite: NBE3U1 or NBE3C1

English ENG4E1
Grade 12 Workplace

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: ENG3E1 or NBE3E1

The Writer's Craft EWC4UE Grade 12 - eLearning University

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: ENG3U1 or 3UA or NBE3U1

Ontario Secondary School Literacy Course OLC401
Grade 12 Open

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

FIRST NATIONS, MÉTIS, AND INUIT LANGUAGES

FNMI Languages: Ojibwe LNOAO1 Level 1 Open

This course is open to the entire student body and will allow students who have no prior Native language experience to develop an appreciation for a Native language and culture, to explore and experience a unique world view, and to learn to speak a Native language. Students will use the language being studied for greetings and daily routines, become familiar with its writing and sound system, and practise basic vocabulary and phrases. Students will also use information technology during course-related activities.

Prerequisite: None

FNMI Languages: Ojibwe LNOBO1 Level 2 Open

This course will enable students to experience the unique respect for life that permeates Native languages and cultures. Students will expand their vocabulary and knowledge of phrases and expressions, using them in simple dialogues, narrative writing, grammatical constructions, and reading, and to exchange information electronically. This course is open to any student who has successfully completed at least four years of elementary Native language study, has successfully completed FNMI Languages: Level 1, or demonstrates the required proficiency.

FIRST NATIONS, MÉTIS, AND INUIT STUDIES

Expressions of First Nations, Métis, and Inuit Cultures NAC101 Grade 9 Open

This course explores various arts disciplines (dance, drama, installation and performance art, media arts, music, storytelling, utilitarian or functional art, visual arts), giving students the opportunity to create, present, and analyse art works, including integrated art works/ productions, that explore or reflect First Nations, Métis, and Inuit perspectives and cultures. Students will examine the interconnected relationships between art forms and individual and cultural identities, histories, values, protocols, and ways of knowing and being. They will demonstrate innovation as they learn and apply art-related concepts, methods, and conventions, and acquire skills that are transferable beyond the classroom. Students will use the creative process and responsible practices to explore solutions to creative arts challenges.

Prerequisite: None

First Nations, Métis, and Inuit in Canada NAC201 Grade 10 Open

This course explores the histories of First Nations and Inuit in Canada from precontact, as well as Métis from their beginnings, to the present day. Students will examine the continuing impact of past social, cultural, economic, political, and legal trends and developments on First Nations, Métis and Inuit individuals and communities. Students will apply the concepts of historical thinking and the historical inquiry process to investigate a range of issues, events, and interactions that have affected First Nations, Métis, and Inuit individuals and communities, including those that continue to affect relations between Indigenous and non-Indigenous peoples in Canada.

Prerequisite: None

Prerequisite: ENG2D1

English: Understanding Contemporary First Nations, NBE3U1
Métis, and Inuit Voices
Grade 11 Universit

This course explores the themes, forms, and stylistic elements of a variety of literary, informational, graphic, oral, cultural, and media text forms emerging from First Nations, Métis, and Inuit cultures in Canada, and also examines the perspectives and influence of texts that relate to those cultures. In order to fully understand contemporary text forms and their themes of identity, relationship, and self-determination, sovereignty, or selfgovernance, students will analyse the changing use of text forms by Indigenous authors/ creators from various periods and cultures in expressing ideas related to these themes. Students will also create oral, written, and media texts to explore their own ideas and understanding, focusing on the

development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. The course is intended to prepare students for the compulsory Grade 12 English university or college preparation course.

English: Understanding Contemporary First Nations, NBE3C1 Métis, and Inuit Voices

Grade 11 College

This course explores the themes, forms, and stylistic elements of literary, informational, graphic, oral, cultural, and media text forms emerging from First Nations, Métis, and Inuit cultures in Canada, and also looks at the perspectives and influences of texts that relate to those cultures. In order to understand contemporary text forms and their themes of identity, relationship, and self-determination, sovereignty, or self-governance, students will study the use of text forms by Indigenous authors/creators from other periods in expressing ideas related to these themes. Students will also create oral, written, and media texts to explore their own ideas and understanding, focusing on the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. The course is intended to prepare students for the compulsory Grade 12 English college preparation course

Prerequisite: ENG2D1 or 2P1

English: Understanding Contemporary First Nations, NBE3E1
Métis, and Inuit Voices
Grade 11 Workplace

This course explores themes, forms, and stylistic elements of literary, informational, graphic, oral, cultural, and media texts emerging from First Nations, Métis, and Inuit cultures in Canada, as well as some texts that relate to those cultures. In order to better understand contemporary texts, students will explore connections between traditional and contemporary text forms and cultural and community aspects of identity, relationships, and self-determination, sovereignty, or self-governance. Students will also create oral, written, and media texts focusing on the development of literacy, communication, and critical thinking skills necessary for success in the workplace and daily life. The course is intended to prepare students for the compulsory Grade 12 English workplace preparation course.

Prerequisite: ENG2D1 or 2P1 or 2L1

FRENCH AS A SECOND LANGUAGE Core French

Core French FSF2D1
Grade 10 Academic

This course provides opportunities for students to communicate in French about personally relevant, familiar, and academic topics in real-life situations with increasing independence. Students will exchange information, ideas, and opinions with others in guided and increasingly spontaneous spoken interactions. Students will develop their skills in listening, speaking, reading, and writing through the selective use of strategies that contribute to effective communication. They will also increase their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning.

Prerequisite: FSF1D1 or 1P1

Core French FSF3U1
Grade 11 University

This course offers students extended opportunities to speak and interact in real-life situations in French with greater independence. Students will develop their listening, speaking, reading, and writing skills, as well as their creative and critical thinking skills, through responding to and exploring a variety of oral and written texts. They will also broaden their understanding and appreciation of diverse French-speaking communities and will develop skills necessary for lifelong language learning.

Prerequisite: FSF2D1

Core French FSF4U1
Grade 12 University

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

Prerequisite: FSF3U1

French Immersion

French Immersion FIF2D1 Grade 10 Academic

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

Prerequisite: FIF1D1

French Immersion FIF3U1
Grade 11 University

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

Prerequisite: FIF2D1

French Immersion FIF4U1/A Grade 12 University

This course provides students with extensive opportunities to communicate, interact, and think critically and creatively in French. Students will consolidate their listening, speaking, reading, and writing skills and apply language learning strategies while communicating about concrete and abstract topics, and will independently respond to and interact with a variety of oral and written texts. Students will study a selection of French literature from the Middle Ages to the present. They will also enrich their understanding and appreciation of diverse French-speaking communities, and will develop skills necessary for lifelong language learning. Prerequisite: FIF3U1

GUIDANCE AND CAREER EDUCA-TION

Career Studies
Career Studies (French Immersion)
Grade 10

GLC205 (0.5 Credit) GLC20F (0.5 Credit) Open

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

Prerequisite: None

Creating Opportunities through Cooperative Education Creating Opportunities through Cooperative Education 2 Credit DC0302 DC030F Open

Grade 11

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

Prerequisite: None

Cooperative Education GLN40C
Cooperative Education (French Immersion) GLN40F
Grade 11/12 Open

2 Credit

This course provides students with opportunities to develop the workplace essential 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 plan for continued learning and work, work with others to design learning experiences, and investigate the recourses and support required to make a smooth transition to their postsecondary destination.

Cooperative Education - Army Reserve COP4XA
Cooperative Education - Navy Reserve COP4XN

Grade 11/12 Open - Summer Only

2 Credit

See page 29 or introductory information about the Canadian Armed Forces Cooperative Education opportunities. More information is available at Student Services.

HEALTH AND PHYSICAL EDUCATION

Healthy Active Living Education PPL201
Healthy Active Living Education (French Immersion) PPL20F
Grade 10 Open

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

Prerequisite: None

Healthy Active Living Education PPL301/E
Grade 11 - In class or eLearning Open

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

Prerequisite: None

Personal and Fitness Activities PAF301 Grades 11/12 Open

This course focuses on the development of a healthy lifestyle through the introduction of lifelong fitness activities in a non-competitive classroom environment. Through the development of skills and practice in yoga, aerobics, swimming and aquabics, and a variety of athletic training methods, students will explore personal fitness goal-setting and lifelong physical well-being.

Prerequisite: None

Healthy Active Living Education PPL401
Grade 12 Open

This course enables students to further develop the knowledge and skills they need to make healthy choices. It places special emphasis on how students can maintain the habits of healthy, active living throughout their lives as they make the transition to adulthood and

independent living. Through participation in a wide range of physical activities in a variety of settings, students can enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.

Prerequisite: None

Health for Life PPZ3CE Grade 11 - eLearning College

This course enables students to examine the factors that influence their own health practices and behaviours as well as those factors that contribute to the development of healthy communities. It emphasizes the concept of wellness, which addresses all aspects of well-being — physical, cognitive, emotional, spiritual and social — and promotes healthy eating, physical activity, and building and maintaining a positive sense of self. Students will develop the skills necessary to make healthy choices and create a personal wellness plan. They will also design initiatives that encourage others to lead healthy, active lives. The course prepares students for college programs in health sciences, fitness, wellness, and health promotion.

Prerequisite: None

Introductory Kinesiology PSK4U1/E Grade 12 - In class or eLearning University

This course focuses on the study of human movement and of systems, factors, and principles involved in human development. Students will learn about the effects of physical activity on health and performance, the evolution of physical activity and sport, and the physiological, psychological, and social factors that influence an individual's participation in physical activity and sport. The course prepares students for university programs in physical education and health, kinesiology, health sciences, health studies, recreation, and sports administration. Prerequisite: Any Grade 11 University or University/College preparation course in science, or any Grade 11 or 12 course in Health and Physical Education

Personal and Fitness Activities PAF401 Grades 11/12 Open

This course focuses on the development of a healthy lifestyle through the introduction of lifelong fitness activities in a non-competitive classroom environment. Through the development of skills and practice in yoga, aerobics, swimming and aquabics, and a variety of athletic training methods, students will explore personal fitness goal-setting and lifelong physical well-being.

Prerequisite: None

MATHEMATICS

Principles of Mathematics MPM2D1
Grade 10 Academic

This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic 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 triangles. Students will reason mathematically as they solve multi-step problems and communicate their thinking.

Prerequisite: MTH1W1 or MTH1WA

Principles of Mathematics - Pre-Advanced Placement MPM2DA

Grade 10 Academic

This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic 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 triangles. Students will reason mathematically as they solve multi-step problems and communicate their thinking.

Prerequisite: MTH1W1 or MTH1WA

Foundations of Mathematics MFM2P1 Grade 10 Applied

This course enables students to consolidate their understanding of relationships and extend their problem-solving and algebraic skills through inves-

tigation, 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: MTH1W1 or MTH1WA

Mathematics MAT2L1 Grade 10 LDCC

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

Prerequisite: MAT1L1 or MTH1W1 or MTH1WA

Functions MCR3U1
Grade 11 University

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

Prerequisite: MPM2D1 or MPM2DA

Functions - Pre-Advanced Placement MCR3UA Grade 11 University

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

Prerequisite: MPM2D1 or MPM2DA

Functions and Applications

MCF3M1

Grade 11 University/College

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 financial and trigonometric applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Prerequisite: MFM2P1 or MPM2D1 or MPM2DA

Foundations for College Mathematics Grade 11

MBF3C1 College

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, as well as of measurement and geometry; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; and develop their ability to reason by collecting, analysing, and evaluating data involving one or two variables. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. Prerequisite: MFM2P1 or MPM2D1 or MPM2DA

Mathematics for Work and Everyday Life Grade 11

MEL3E1 Workplace

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: MAT2L1 or MFM2P1 or MPM2D1

Advanced Functions Grade 12

MHF4U1 University

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

Prerequisite: MCR3U1 or MCR3UA

Calculus and Vectors

MCV4U1/F University

Grade 12 - In class or eLearning

This course builds on students' 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, rational, exponential, and sinusoidal 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 in intended for students who plan to study mathematics in university and who may choose to pursue careers in fields such as physics and engineering.

Prerequisite: MHF4U1 (can be taken concurrently with or can precede MCV4U1)

Concurrent 2 Credit offering for AP Mathematics Students Advanced Functions / Calculus and Vectors

Full Year 12MFCV

Please take a moment to read the course descriptions for the full curriculum overview and expectations. This 2 credit, consecutive offering of the senior math courses will allow students to begin the AP Calculus and Vectors immediately upon completion of the Advanced Functions. The 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 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 courses 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.

This 2 credit, consecutive offering builds on students' previous experience with functions and their developing understanding of rates of change. Students will broaden their understanding of rates of change to include the derivatives of polynomial, sinusoidal, exponential, rational, and radical functions, apply these concepts and skills to the modelling of real-world relationships; and extend their knowledge of calculus to the field of integration and related theorems. Students will refine their use of the mathematical processes necessary for success in senior Mathematics. Students will solve problems involving geometric and algebraic representations of vectors and representations of lines and planes in three-dimensional space. This combined 2 credit 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.

Prerequisites: MCR3U1 or MCR3UA

Data Management Grade 12

MDM4U1 University

This course broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing large amounts of information; solve problems involving probability and statistics; and carry out a culminating project 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: MCF3M1 or MCR3U1 or MCR3UA

Foundations for College Mathematics Grade 12

MAP4C1 College

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyze data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.

Prerequisite: MBF3C1 or MCF3M1 or MCR3UA or MCR3U1

Mathematics for Work and Everyday Life Grade 12

MFI 4F1 Workplace

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 and create household budgets; 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: MEL3E1

SCIENCE

General Science

Science

SNC2D1 Grade 10 Academic

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Students are also given opportunities to further develop their scientific investigation skills. 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: SNC1W1

Science SNC2P1 Grade 10 Applied

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

Prerequisite: SNC1W1

Biology

SBI3U1 **Biology** Grade 11 University

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: SNC2D1

Biology SBI3C1 College Grade 11

This course focuses on the processes involved in biological systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, animal anatomy and physiology, plant structure and physiology, and environmental science. 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: SNC2D1 or 2P1

SBI4II1 **Biology** Grade 12 University

This course provides students with the opportunity for indepth 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 laboratory skills needed for further study in various branches of the life sciences and related fields.

Prerequisite: SBI3U1

Chemistry

SCH3U1/E Grade 11 - In class or eLearning University

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: SNC2D1

SCH4U1/E Chemistry Grade 12 - In class or eLearning University

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: SCH3U1

SCH4C1/E Chemistry College Grade 12 - In class or eLearning

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 related 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: SNC2D1 or 2P1

Physics

Physics SPH3U1 University Grade 11

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: SNC2D1

SPH4CE **Physics** Grade 12 - elearning College

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; 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: SNC2P1 or SNC2D1 or SNC2DA

SPH4U1/E Grade 12 - In class or eLearning University

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: SPH3U1

Environmental Science

SVN3E1 **Environmental Science** Grade 11

Workplace

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: SNC1D1 or 1P1 or 1L1 or 2L1

SOCIAL SCIENCES AND HUMANITIES

Family Studies

Food and Nutrition HFN201 Food and Nutrition (French Immersion) HFN20F Grade 9 or 10 **Open**

This course focuses on guidelines for making nutritious food choices. Students will investigate factors that influence food choices, including beliefs, attitudes, current trends, traditional eating patterns, food marketing strategies, and individual needs. Students will also explore the environmental impact of a variety of food choices at the local and global level. The course provides students with opportunities to develop food preparation skills and introduces them to the use of social science research methods in the area of food and nutrition.

Prerequisite: None

Food and Culture (French Immersion) HFC3MF Grade 11 University/College

This course focuses on the flavours, aromas, cooking techniques, foods, and cultural traditions of world cuisines. Students will explore the origins of and developments in diverse food traditions. They will demonstrate the ability to cook with ingredients and equipment from a variety of cultures, compare food-related etiquette in many countries and cultures, and explain how Canadian food choices and traditions have been influenced by other cultures. Students will develop practical skills and apply social science research methods while investigating foods and food practices from around the world.

Prerequisite: None

Food and Culture HFC3E1 Grade 11 Workplace

This course focuses on the flavours, aromas, cooking techniques, foods, and cultural traditions of world cuisines. Students will demonstrate the ability to cook with ingredients and equipment from a range of cultures, describe food-related etiquette in a variety of countries and cultures, and explore ways in which Canadian food choices and traditions have been influenced by other cultures. Students will have opportunities to develop practical skills and apply research skills as they investigate foods and food practices from around the world. Prerequisite: None

Raising Healthy Children HPC301/E Grade 11 - In class or eLearning

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

Prerequisite: None

Human Development Throughout the Lifespan Grade 12 - eLearning

University/College

HHG4ME

This course offers a multidisciplinary approach to the study of human development throughout the lifespan. Students will learn about a range of theoretical perspectives on human development. They will examine threats to healthy development as well as protective factors that promote resilience. Students will learn about physical, cognitive, and social-emotional development from the prenatal period through old age and will develop their research and inquiry skills by investigating issues related to human development.

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

Families in Canada HHS4UE Grade 12 - eLearning University

This course enables students to draw on sociological, psychological, and anthropological theories and research to analyse the development of individuals, intimate relationships, and family and parent-child relationships. Students will focus on issues and challenges facing individuals and families in Canada's diverse society. They will develop analytical tools that enable them to assess various factors affecting families and to consider policies and practices intended to support families in Canada. They will develop the investigative skills required to conduct and communicate the results of research on individuals, intimate relationships, and parent-child relationships.

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

Nutrition and Health HFA4U1/E Grade 12 - In class or eLearning University

This course examines the relationships between food, energy balance, and nutritional status; the nutritional needs of individuals at different stages of life; and the role of nutrition in health and disease. Students will evaluate nutrition-related trends and will determine how food choices can promote food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food-preparation techniques, and develop their social science research skills by investigating issues related to nutrition and health.

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

Nutrition and Health HFA4C1 Grade 12 College

This course focuses on the relationship between nutrition and health at different stages of life and on global issues related to food production. Students will investigate the role of nutrition in health and disease and assess strategies for promoting food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food-preparation techniques, and refine their ability to use social science research and inquiry methods to investigate topics related to nutrition and health.

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

General Social Sciences

 Intro to Anthropology, Sociology and Psychology
 HSP3U1

 Intro to Anthropology, Sociology and Psychology (French Immersion)
 HSP3UF

 Grade 11
 University

This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science, and to become familiar with current thinking on a range of issues within the three disciplines.

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

Introduction to Anthropology, Sociology and Psychology HSP3C: Grade 11 College

This course introduces students to theories, questions, and issues related to anthropology, psychology, and sociology. Students learn about approaches and research methods used by social scientists. Students will be given opportunities to apply theories from a variety of perspectives, to conduct social science research, and to become familiar with current issues within the three disciplines.

Prerequisite: None

Challenge and Change in Society HSB4U1/E
Grade 12 - In class or eLearning University

This course focuses on the use of social science theories, perspectives, and methodologies to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour and their impact on society. Students will critically analyse how and why cultural, social, and behavioural patterns change over time. They will explore the ideas of social theorists and use those ideas to analyse causes of and responses to challenges such as technological change, deviance, and global inequalities. Students will explore ways in which social science research methods can be used to study social change.

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

TECHNOLOGICAL EDUCATION

Communications Technology Grade 10

TGJ201 Open

This course introduces students to communications technology from a media perspective. Students will work in the areas of TV/video and movie production, radio and audio production, print, graphic communications, photography, and interactive new media 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.

Prerequisite: None

Communications Technology: Print and Graphic Communication(Yearbook)

TGG3M1

: 11

University/College

This course enables students to develop media knowledge and skills while designing and producing the school yearbook and other projects in the area of graphic design communications. Students will work both independently and as part of a team learning the basics of journalism, layout, and design, photography, publishing, marketing and advertising through the production of the school yearbook and newsletters. Classroom activities will be closely related to the real world on interviewing, reporting, photographing, meeting deadlines and producing both paper and online publications. 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. Prerequisite: None

Communications Technology: Print and Graphic

TGG4M1

 ${\bf Communication (Yearbook)}$

Grade 12 University/College

This course enables students to develop media knowledge and skills while designing and producing the school yearbook and other projects in the area of graphic design communications. Students will work both independently and as part of a team gaining expertise in the areas of digital workflow, photo composition, journalism, layout design and publishing in both print and web-based environments. Practical projects may include yearbook cover design, layouts, photo journalism, web galleries, and portfolio development. Classroom activities continue to reflect the real world of interviewing, reporting, photographing, meeting deadlines, and producing publications. Students will also expand their awareness of environmental and social issues related to communications technology and will investigate career opportunities and challenges in a rapidly changing technological environment.

Prerequisite: TGG3M1

Construction Technology

Construction Technology

TCJ201 Open

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 post secondary pathways leading to careers in the industry. Students will develop skills through projects such as canoe paddles, furniture, cabinets, structures, and others.

Prerequisite: None

Construction Engineering Technology

TCJ3C2 - 2 Credit Course

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.

Prerequisite: None

Students interested in being part of the Construction Specialist High Skills Major Program are required to choose the 2 credit version of the course.

Construction Technology Grade 11

TCJ3E2 - 2 Credit Course Workplace

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 post secondary and career opportunities in the field.

Prerequisite: None

Students interested in being part of the Construction Specialist High Skills Major Program are required to choose the 2 credit version of the course.

Custom Woodworking TWJ3E1 Grade 11 Workplace

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, post secondary training, and career opportunities in the field that may be pursued directly after graduation.

Prerequisite: None

Construction Engineering Technology Grade 12

TCJ4C2 - 2 Credit Course College

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: TCJ3C1

Construction Technology

TCJ4E2 - 2 Credit Course

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: TCJ3E1

TWJ4E1 **Custom Woodworking** Grade 12 Workplace

This course enables students to further develop knowledge and skills related to the planning, design, and construction of residential and/or commercial cabinets and furniture. 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: TWJ3E1

Hairstyling and Aesthetics

Hairstyling and Aesthetics Grade 10

TXJ201 0pen

This course presents hairstyling, make-up, and nail care techniques from a salon/spa perspective. Using materials, processes, and techniques used in the industry, students learn fundamental skills in hairstyling, giving manicures, and providing hair/scalp analyses and treatments. Students will also consider related environmental and societal issues, and will explore secondary and postsecondary pathways leading to careers in the field of hairstyling and aesthetics.

Prerequisite: None

Hairstyling and Aesthetics

TXJ3E1

Workplace

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

Prerequisite: None

Hairstyling and Aesthetics Grade 12

TX I4F1

Workplace

This course enables students to develop increased proficiency in a wide range of hairstyling and aesthetics services. Students will strengthen their fundamental skills and develop an understanding of common business practices and strategies in the salon/spa industry. Students will also expand their understanding of environmental and societal issues and their knowledge of post secondary destinations in the hairstyling and aesthetics industry. Come experience the endless prospects that this course has to offer. The only place to find all this is exclusively at Hammarskiold.

Prerequisite: TXJ3E1

Manufacturing Technology

Manufacturing Technology - Metal Working Grade 10

TMJ201 Open

This course introduces students to the manufacturing industry by giving them an opportunity to design and fabricate products using a variety of processes, tools, and equipment. Students will learn about technical drawing, properties and preparation of materials, and manufacturing techniques. Student projects may include a robotic challenge, a design challenge, and fabrications project involving processes such as machining, welding, and sheet metal forming. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about secondary and post secondary pathways leading to careers in the industry. Hammarskjold's fully equipped Manufacturing Lab and Manufacturing courses will provide you with endless "project-driven" learning opportunities throughout high school.

Prerequisite: None

Manufacturing Technology - Metal Working

TMJ3C1 College

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.

Prerequisite: None

Manufacturing Technology - Metal Working Grade 11

TMJ3E1 Workplace

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 in Hammarskjold's fully equipped Manufacturing Lab. 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.

Prerequisite: None

Manufacturing Technology - Metal Working Grade 12

TMJ4C1 College

This course enables students to further develop knowledge and skills related to machining, welding, print reading, and computer numerical control (CNC). 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: TMJ3C1

Manufacturing Technology - Metal Working TMJ4E1 Grade 12 Workplace

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.

Transportation Technology

Transportation Technology Grade 10

Prerequisite: TMJ3E1

TTJ201 Open

This course introduces students to the service and maintenance of vehicles. 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.

Prerequisite: None

Transportation Technology: Auto Service TTA3C1 Grade 11 College

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

Prerequisite: None

Transportation Technology: Auto Service TTA3C2
Grade 11 College

2 Credit

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

Prerequisite: None

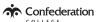
Transportation Technology: Auto Service TTA4C1 Grade 12 College

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; 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: TTA3C1

Please check with Student Services for the current selection of dual-credit courses!

College Now!



http://www.confederationcollege.ca/collegenow

Change Your Life Through Learning

The College Now program is provided in partnership with the School College Work Initiative (SCWI), the Thunder Bay Catholic District School Board, and Lakehead Public Schools. Students can take "College Now" courses with an opportunity to earn credits that count toward both a secondary school and college diploma or certificate. Dual Credits let students "experience" college courses while still in high school.

Students must be:

- 17 or 18 years old in the graduating year;
- working towards an Ontario Secondary School Diploma;
- registered in a minimum of one high school credit in their home school; and
- approved by the school Principal.

In first semester, students have the opportunity to enroll in program specific college classes as a dual credit student (top-up credit in an actual college class with college students) as well as General Education Electives that are congregated (only high school students).

In second semester, students have the opportunity to enroll in General Education Electives and program specific classes that are all offered as congregated classes (only high school students).

Please check with Student Services to confirm which courses are available each semester.



www.lakeheadschools.ca

College Link

The College Link program will bring students into the college environment while completing their high school course requirements. College Link emphasizes communication, literacy, and planning for the future.

Students will be enrolled in the dual credit course General Education Elective while working on high school credits through an independent learning model. Once a student has achieved that dual credit successfully they are then allowed to take up to three (3) college delivered dual credit top up courses.

College Link courses are subject to change, please see Student Services for a current list of course options.

Monday-Friday | 9:30 am 3:30 pm

Please see Administration/Vice Principal to be enrolled in the College Link Program.

Team Taught Dual Credits

These programs are team taught by College and Secondary School Staff. Students are able to obtain both a Secondary Credit and a College Credit simultaneously. These dual credit opportunities are available at the designated school.

Aviation Link

TTL4C Transportation Technology: Light Aircraft (Grade 12) & TP166 Aviation Studies 1 (College)

Students will be introduced to a variety of basic skills related to the aviation industry. Students will have the opportunity to use aircraft simulators, classroom time, and practicum in an actual aircraft maintenance hangar. This course is recommended for students who are considering flight management, aviation technician, or aerospace manufacturing engineering technician / technology as a future program. Through a combination of theory and practical experience, students will gain the background necessary to proceed with further study in a more advanced program. **Superior | Hammarskjold | Westgate**

Manufacturing Link

TMJ4E Manufacturing Technology (Grade 12) or TMW4E (Welding) & WC 126 Flat T-Joint Module (College)

In this course the students will identify the different welding procedures for T-Joints in flat, horizontal, vertical and overhead positions. Welding exercises are demonstrated using 6010-11 and 7018 electrodes in these positions and specific safety precautions for overhead welding are addressed.

Superior | Westgate

Transportation Link

TTA4C Transportation Technology (Grade 12) &

HC 121 Applied Work Practices and Procedures (College)

This course introduces students to occupational health and safety, basic hand and power tools, precision measuring tools, fastening devices and torquing procedures. Heating and cutting methods are introduced.

Westgate

Foods of the Americas

GE080/TKL4T (College Code/High School Code)

This course provides a basis for understanding the global impact that resulted from the introduction of indigenous foods from the Americas as well as the cultural impact that colonization had on the lifestyles of the American First Nations peoples.

Introduction to the Trades

TP155/TAP4T (College Code/High School Code)

Trades Studies I is designed to introduce the students to a variety of skilled trades. The students will have the opportunity to spend one third of the semester in each of the following trade areas; carpentry, welding and motive power. This course is recommended for students who are considering a trades, techniques or pre-apprenticeship as a future program. Through a combination of theory and practical experience, the student will gain the background necessary to proceed with further study in a more advanced program.

Building Skills for Success

GE113/JEB4T (College Code/High School Code)

This transformative course will provide you with the practical skills, knowledge and attitudes you need for success in college, your career and your life. In order to maximize your post-secondary experience, you will learn about your personal learning style, how to study effectively, how to take notes, how to manage your time, the importance of effective communication and much more. You will also discover specific abilities and characteristics that will provide you with the opportunity for personal growth and increased well-being. Learn how to maximize your potential with this course!

Baking and Pastry Arts

CU130/TUE4T (College Code/High School Code)

This course will enable the student to demonstrate basic professional baking techniques and a working knowledge of baking fundamentals for a la carte and banquet settings. The course content will cover the mixing methods used to produce yeast breads, quick breads, pies, tarts, doughs, sponge based pasteries, custard, creams, choux paste and laminate products.

Introduction to Psychology PY199/HBB4T (College Code/High School Code)

This course introduces the student to the world of psychology by highlighting human behaviour and mental processes at the individual level. Students will learn why people do and think the way they do from a variety of perspectives and how psychological principles apply to everyday life situations. This introductory course provides a strong foundation for other courses in psychology.

Wellness for Life

AS220/PPI4T (College Code/High School Code)

The physical, emotional, social, intellectual, and spiritual dimensions of health are the focus of this course. Students will be provided with current factual information about a broad range of health-related issues including stress, substance abuse, sexuality, fitness, weight management, environmental concerns, and death and dying. As well, students will be actively involved in examining the impact of lifestyle choices upon their own health status.

Introduction to the Trades

TP155/TAP4T (College Code/High School Code)

Trades Studies I is designed to introduce the students to a variety of skilled trades. The students will have the opportunity to spend one third of the semester in each of the following trade areas; carpentry, welding and motive power. This course is recommended for students who are considering a trades, techniques or pre-apprenticeship as a future program. Through a combination of theory and practical experience, the student will gain the background necessary to proceed with further study in a more advanced program.

Check with Student Services for dates, times, and a current list of available courses

SENIOR SPECIALIST FOCUS LEARNING

Cooperative Education

Cooperative Education is a unique program for students, integrating academic and technical study with practical experience in business and industry.

This learning experience helps students make informed decisions about future careers. Students also develop the work habits, attitudes and job skills necessary for a successful transition from secondary school to the workplace or post-secondary education. Cooperative Education students are typically in the senior grades, have a variety of post-secondary destinations: apprenticeship, college, university, work, and may be studying in any subject area.

Cooperative education opportunities are available in all Lakehead Public High Schools.

Ontario Youth Apprenticeship Program (OYAP)

All senior students can explore the career potential of the skilled trades with OYAP as their start point. Over 140 skilled trades offer an opportunity to learn, work and enjoy occupations with career flexibility and portability, professional licensing, a wide range of further training opportunities, small business ownership and a diversified and valued skill set.



Students can begin to accumulate credit towards an apprenticeship in their chosen skilled trade

while they complete the requirements of their high school education. Students who are interested in participating in OYAP will need to choose cooperative education in their Grade 11 and/or Grade 12 year. To participate, students must have completed 16 credits and be at least 16 years of age.

An Ontario Youth Apprenticeship Program (OYAP) student is a student who is earning cooperative education credits for work experience in an apprenticeship occupation. The student may or may not be formally registered as an apprentice while attending secondary school.

Focused Apprenticeship Skills Training (OYAP-FAST)

If you are interested in learning more about the skilled trades through cooperative education, OYAP-FAST is an accelerated stream within OYAP that will allow students in Grades 11 and 12 to participate in more apprenticeship learning through additional co-operative education credits while completing their OSSD.

To participate in OYAP-FAST, students must:

- Meet the OYAP eligibility requirements -15 years or older, have completed 14 credits toward OSSD
- Have signed parent/guardian consent to participate in OYAP-FAST

Completion requirements for OYAP-FAST include that a student has:

- Earned 8 to 11 cooperative education credits with their placement component in the skilled trades.
- Registered as an apprentice (obtained a Registered Training Agreement (RTA)) by the time they complete their eighth cooperative education credit.

Students who meet the above completion requirements and all other OSSD requirements will be awarded the OYAP-FAST seal on their OSSD.

Cooperative Education Programs

Canadian Armed Forces Army Reserve Semester 2

COP4XA

The Army Reserve Co-op Program includes basic military training as an introduction to life in the Canadian Forces, specific to the Army Reserve. This means training to be a member of one of the Army Reserve units in Thunder Bay, at the Armoury on Park Avenue. The Army Reserve units in Thunder Bay are: 736 Communications Squadron, which specializes in electronic communications; the Lake Superior Scottish Regiment, which is an infantry unit; 18 Service Battalion, which specializes in transport, supply/logistics and technical repair and maintenance; and 18 Field Ambulance, which specializes in health care and trauma support services.

To be eligible, students must meet the following conditions:

- 16 years old prior to the starting date of the program;
- A Canadian citizen;
- Have a minimum of 15 credits prior to the start of the program;
- Enrolled in Semester 2 Co-op (afternoon);
- Successfully complete the entrance requirements prior to December 1 of the school year (physical, medical, aptitude);
- Able to attend program from 1:00 p.m. 5:30 p.m., Monday through Friday and the occasional weekend training sessions, as well as the March Break.

Naval Reserve

COP4XN

Summer Program (See Student Services)

The Naval Reserve Co-op Program includes introductory training to life in the Canadian Forces, specifically the Canadian Naval Reserve. This means training to be part of the crew of a Canadian Navy Ship, a member of a Port Security Unit, a Port Inspection Diving Team or a Naval Intelligence Team. Students will work out of HMCS Griffon, Thunder Bay's Naval Reserve Unit located on Algoma Street.

To be eligible students must meet the following conditions.

- 16 years old prior to the start date of the program;
- A Canadian citizen;
- Have a minimum of 15 credits prior to start date;
- Successfully complete the entrance requirements prior to the start (physical, medical, aptitude);
- Be able to attend program

Aviation Technology

TTL3CC | TTL4CC

Aviation Technology is a program that is taught at the Confederation College A.C.E. Centre located at the Thunder Bay International Airport.

Grade 11 Semester 1 | Grade 12 Semester 2

Students will study aerodynamics, aircraft components, aircraft hardware and materials, inspection procedures and methods, ground marshalling and handling of aircraft, aircraft engines, and flight related subjects. Aviation Technology may include a cooperative education component incorporating practical experience within the aviation industry at the airport. This partnership between Lakehead Public Schools and Confederation College will give students regular exposure to the College's A.C.E. Aviation facility. Included in the program are field trips to related industries such as air traffic control, Bombardier and the Ministry of Natural Resources (CL415 Water Bombers.) All mathematics and physics requirements will be taught in the program.

Dual Credits

Secondary Credit + College Credit

Dual credits are defined as a high school credit and a college credit earned at the same time. The opportunity to earn two credits simultaneously is available to senior students in programs that vary each year.





Specialist High Skills Majors

Specialist High Skills Majors were developed to give students the opportunity to focus on a specific area of study.

Credit bundles are made up of sector-specific courses. Students acquire skills and knowledge in a hands-on, career-related learning environment with others who have the same goals and career expectations.

- Major credits
- Cooperative education credits (sector-specific)
- Plus additional credits with a focus in the stated discipline

Application and scheduling information is available from your Student Services Guidance Counsellor. Stop in for more information about the focus courses and specialized training students can receive with their SHSM participation.

Arts & Culture | Westgate

For students who are interested in a career in the Arts and Culture sector (music, dance, drama, graphics, design, communication technology, visual art, theatre arts, and more) this Specialist High Skills Major offers students a solid foundation in the area of study. Students will be required to declare a Major area of study. The SHSM required credits, sector specific cooperative education opportunities, along with specialized sector training and certification are available for students to further expand their learning experiences.

Aviation & Aerospace | Westgate

For students who are interested in a career in the Aviation and Aerospace sector (aircraft maintenance, aircraft inspection, instrumentation, electrical or avionics mechanics, piloting, air traffic control, flight engineering, mechanical engineering, and more) this Specialist High Skills Major offers students a solid foundation in the area of study. The SHSM required credits, sector specific cooperative education opportunities, along with specialized sector training and certification are available for students to further expand their learning experiences.

Business | Westgate

For students who are interested in a career in the Business sector (trade and commerce, finance and insurance, accounting, real estate, marketing, information technology, and more) this Specialist High Skills Major offers students a solid foundation in the area of study. The SHSM required credits, sector specific cooperative education opportunities, along with specialized sector training and certification are available for students to further expand their learning experiences.

Construction | Hammarskjold, Westgate

For students who are interested in a career in the Construction sector (carpentry, architecture, construction management, electrical, home renovations, plumbing, structural engineering, home inspection, and more) this Specialist High Skills Major offers students a solid foundation in the area of study. The SHSM required credits, sector specific cooperative education opportunities, along with specialized sector training and certification are available for students to further expand their learning experiences.

Health & Wellness | Superior

For students who are interested in a career in the Health and Wellness sector (child and youth work, Aboriginal early childhood education, fire and police foundations, massage therapy, paramedics, ultrasound, dental, nursing, nutrition sciences, physical therapy, and more) this Specialist High Skills Major offers students a solid foundation in the area of study. The SHSM required credits, sector specific cooperative education opportunities, along with specialized sector training and certification are available for students to further expand their learning experiences.

Hospitality & Tourism | Westgate

This Specialist High Skills Major (SHSM) program is designed for students interested in a career in one of the over 400 hundred occupations in the Hospitality and Tourism sector. Hospitality and Tourism jobs provide plenty of opportunities for advancement, widely transferable skills, and ongoing training.

As part of the Hospitality & Tourism SHSM, you will earn six or more sector specific certifications, earn a minimum or two co-operative education credits, 4 major credits and be involved in experiential learning and reach ahead experiences.

For Hospitality & Tourism SHSM participants, possible careers include:

- apprenticeship baker, cook, chef, special events coordinator
- college flight attendant, food service manager
- university nutritionist, dietician, hotel/resort manager
- entry level workplace hotel valet, bartender

Justice, Community Safety & Emergency Services | Hammarskjold

For students who are interested in a career in either the First Responder Stream (Canadian Armed Forces, firefighting, paramedics, law enforcement, corrections, border control, and more) or Legal and Administrative Stream (law, bylaws, government, paralegal, policy, administration, and more) this Specialist High Skills Major offers students a solid foundation in the chosen area of study. The SHSM required credits, sector specific cooperative education opportunities, along with specialized sector training and certification are available for students to further expand their learning experiences.

Manufacturing | Superior, Westgate

For students who are interested in a career in the Manufacturing sector (metal work, welding, millwrighting, machining, engineering, and more) this Specialist High Skills Major offers students a solid foundation in the area of study. The SHSM required credits, sector specific cooperative education opportunities, along with specialized sector training and certification are available for students to further expand their learning experiences.

Transportation Services | Westgate

For students who are interested in a career in the Transportation Services sector (automotive service, heavy duty equipment operation, stationary engineering, electrical engineering, machine operation, and more) this Specialist High Skills Major offers students a solid foundation in the area of study. The SHSM required credits, sector specific cooperative education opportunities, along with specialized sector training and certification are available for students to further expand their learning experiences.



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