



## NORTHERN LAKES SCHOOL PROGRAM AND COURSE CALENDAR

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**Northern Lakes School Website:** <http://ahs.rrdsb.com/>

## NORTHERN LAKES SCHOOL PROGRAM AND COURSE CALENDAR

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**Northern Lakes School Mission:**      *Excellence Through the Courage to Care*

### **Message to Parents and Students**

There is nothing more important to your success as a contributing member of society than attaining a quality high school education. It is a minimum standard for the technology and information age that we live in. Northern Lakes School and its staff have made a commitment to help every student have a successful outcome from their secondary school experience. Our close-knit, supportive environment of high expectations will ensure success for all students who are willing to challenge themselves.

Northern Lakes School has a proud tradition of excellence in Academics, Co-operative Education, Athletics, Outers and Technology programs. We depend heavily on staff, students, parents, and the community to keep these traditions alive. We must work together to make your experience at Northern Lakes School the best it can be. We have branched out to offer programs through e-learning; opening more opportunities to our students through accessing the expertise of staff members at other schools in our Board.

It is important that the students and parents/guardians read the Program and Course Calendar thoroughly to become acquainted with the school programs and make choices for their program from a realistic perspective that will ensure success. Further information is available on any aspect of this calendar by contacting the school at 597 - 2703.

We look forward to the 2022-2023 school year and hope it will be an exciting and rewarding year for all our students.

### **Common Vision: *Our unique educational community will:***

- foster well-rounded individuals;
- provide positive role models for students to strive toward;
- provide all students with opportunities for success;
- encourage and promote interaction between community and school;
- provide an environment in which students pursue self-improvement;

***Our vision is future focused and based on positive exit outcomes for our graduates.***

### **Belief Statements: *At Northern Lakes School, we believe:***

- all students can learn;
- students learn in different ways and at different rates;
- students need active engagement;
- students need a safe and supportive environment;
- success breeds success

## Equal Opportunity Statement

The school environment is one of the major agents of socialization in our society and is of vital importance in the growth and development of our young people. It is essential, therefore, that the school provides every opportunity to maximize the potential of both male and female students. In order to give all students the chance to develop in the direction of their talents, the school has designed its curriculum and directed its teaching methods, materials and counselling services to create a learning environment that is free from gender bias. All students, regardless of their career plans, are encouraged to take a wide variety of courses. They must be adequately prepared for the highly competitive environment beyond secondary school. Educators and parents must help them come to terms with the changing roles, values, and attitudes towards men and women.

**This Program and Course Calendar reflects the most current information available at the time of publications. The school administration reserves the right to establish or cancel courses depending upon the course enrolment, availability of facilities and/or availability of qualified teachers, subsequent to the publication of this guide.**

## OSSD DIPLOMA REQUIREMENTS

In order to earn an Ontario Secondary School Diploma (OSSD), a student must earn a minimum of 30 credits distributed as follows:

### Compulsory Credits (Total of 18)

4	credits in English (1 credit per grade)
1	credit in French as a second language
3	credits in Mathematics (at least 1 credit in Grade 11 or 12)
2	credits in Science
1	credit in Canadian History
1	credit in Canadian Geography
1	credit in the Arts
1	credit in Health and Physical Education
.5	credit in Civics
.5	credit in Career Studies

Group 1 -- additional credit in English, or French as a second language, \*\* or a Native language, or a classical or an international language, or social sciences and the humanities, or Canadian and world studies, or guidance and career education, or co-operative education\*\*\*

Group 2 -- additional credit in health and physical education, or the arts, or business studies, or French as a second language, \*\* or co-operative education \*\*\*

Group 3 -- additional credit in science (Grade 11 or 12), or technological education, or French as a second language, \*\* or computer studies, or co-operative education \*\*\*

*Note: A maximum of 2 credits in co-operative education can count as compulsory credits.*

### Elective Credits (Minimum of 12)

The optional credits may be chosen from the rest of the school programme.

**Successful completion of:**

- Ontario Secondary School Literacy Test or the Ontario Secondary School Literacy Course
- 40 Hours of Community Involvement Activities. **Note:** as of July 2011, students can begin attaining Community Service hours during the summer (July & August) prior to entering Grade 9.

\*A maximum of 3 credits in English as a second language (ESL) or English literacy development (ELD) may be counted towards the 4 compulsory credits in English, but the fourth must be a credit earned for a Grade 12 compulsory English course.

\*\*In groups 1, 2, and 3, a maximum of 2 credits in French as a second language can count as compulsory credits, one from group 1 and one from either group 2 or group 3.

\*\*\*A maximum of 2 credits in cooperative education can count as compulsory credits. The 12 optional credits may include up to 4 credits earned through approved dual credit courses.

## **NORTHERN LAKES SCHOOL PROGRAM AND COURSES**

### ***Granting Credits***

A credit is granted in recognition of the successful completion of a course that has been scheduled for a minimum of 110 hours. Students can earn only one credit per course. You **do not** earn a second credit when upgrading a course.

### ***Granting Credits for Ministry Approved Programs Taken Outside the School***

#### **AMX3M: Grade VII Practical and Grade I Rudiments of the Royal Conservatory of Music, Toronto**

A student who has successfully completed the requirements for the above may count a maximum of one non-Grade 12 university/college preparation credit towards the OSSD *in addition* to any other non-Grade 12 university/college preparation music credits earned in the school:

#### **AMX4M: Grade VIII Practical and Grade II Rudiments of the Royal Conservatory of Music, Toronto**

A student who has successfully completed the requirements for the above may count a maximum of one Grade 12 university/college preparation credit towards the OSSD *in addition* to a maximum of one other Grade 12 university/college preparation credit in music earned in the school:

*Students who have completed the requirements for the above music programs should submit proof to the Guidance office.*

### ***Courses and Level of Difficulty***

Students must select their courses and level of difficulty based on their ability to be successful. The assistance and recommendation of the grade 8 or current subject teachers is very important. Guidance staff or the administration will contact parents of any student who may be misplaced. Successful completion of all credits in Grade 9 and 10 is critical to keeping students on the path to graduation.

### ***School Administration***

The school administration reserves the right to establish or cancel courses depending upon the course enrolment, availability of facilities and/or availability of qualified teachers. Students are asked to number their courses in order of preference to assist administration when deciding courses to offer.

### ***Mandatory e-learning Component***

Beginning with students who entered Grade 9 in the 2020-2021 school year, all students must earn at least two online learning credits as part of the requirements for an Ontario Secondary School Diploma (OSSD), unless they have opted out or been exempted.

***How to opt out:*** Parents who wish to opt out or exempt their child from the online graduation requirement must complete the opt-out form available from the school board.

Exemption from the online learning graduation requirements can be requested by:

- The parent or guardian of the secondary student
- Students who are 18 years of age or older
- Students who are 16 or 17 years of age and have withdrawn from parental control

### ***Eligible Credits***

Students must take online learning courses at a school that is authorized to offer credits towards the Ontario Secondary School Diploma.

### ***Substitutions for Compulsory Courses***

In order to ensure that all students can qualify for the OSSD, the Principal may approve the substitution of a limited number of compulsory credits. Principals may replace up to three compulsory credits with courses from the remainder of those that meet the compulsory credit groupings. An appointment with the principal is required to discuss each substitution request.

### ***40 Hours Community Involvement***

Every student who begins secondary school during or after the 1999-2000 school year **must** complete 40 hours of community involvement activities as part of the requirements for an OSSD. A list of Board-approved activities is provided to students in their first year of high school. Students arrange for the completion of the hours with the assistance of their parents. Students keep track of their accumulated hours through the guidance office by completing a Community Involvement Activity sheet after each volunteer activity. Students can begin attaining Community Service hours during the summer (July & August) prior to entering Grade 9.

### ***Ontario Secondary School Literacy Test***

All students who enter Grade 9 in the 2000 - 2001 school year, or later, must successfully complete the provincial Grade 10 Ontario Secondary School Literacy Test in order to earn a secondary school diploma. The test will be based on the Ontario curriculum expectations for language and communication - particularly reading and writing - up to and including Grade 9.

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

Students who have an Individual Education Plan will be provided with the same accommodations for the literacy test as are provided in his/her regular course work. Deferrals and exemptions may be granted to those students

who have not acquired the level of proficiency in English to successfully complete the test or who are not working toward a secondary school diploma.

Students who have attempted the OSSLT more than once and have been unsuccessful may enrol in the Ontario Secondary School Literacy Course in their grade 12 year. Successful completion of this course fulfils the Literacy requirement for graduation purposes. It also qualifies as one of the compulsory English credits.

### **Student Records, Diploma, Transcript & Certificates**

#### **Ontario Student Record**

The cumulative record of each student's progress is maintained in the Ontario Student Record folder. The folder has a variety of sections where information is stored to assist in planning for a student's program. Report cards, letters, testing data, French language instruction records, Special Education reports, and vital medical information are some of the documents kept in the OSR. Students and parents have access to this information by contacting a guidance counsellor or administrator.

#### **Ontario Student Transcript**

The transcript of marks lists all the courses which have been successfully completed; the marks and credits obtained. Under the new full disclosure policy, Grade 11 and 12 courses failed, repeated or withdrawn from will also be recorded. It is an important document for employment purposes and for admission to post-secondary institutions. Students and parents may have access to this information by contacting a guidance counsellor or administrator.

**The Ontario Secondary School Diploma** is issued by the Ontario Ministry of Education and Training, and states that a student has successfully completed the minimum requirements for an O.S.S.D.

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

#### **Compulsory Credits (total of 7)**

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

#### **Optional Credits (total of 7)**

7 credits selected by the student from available courses

Students who leave school before fulfilling the requirements for the Ontario Secondary School Diploma or the Ontario Secondary School Certificate may be granted a **Certificate of Accomplishment**. The Certificate of Accomplishment may be a useful means of recognizing achievement for students who plan to take certain vocational programs or other kinds of further training, or who plan to find employment after leaving school.

### ***Semester System***

The high school year is organized into two semesters. Students take four classes per semester. Classes are 75 minutes in length. Two classes are scheduled in each of the morning and afternoon time blocks with a 10-minute transition time between classes.

Report cards are issued at mid-semester and the end of each semester.

### ***Student Responsibilities***

Every student will be provided with a Code of Student Behaviour at the start of each school year. This code outlines expected behaviour and responsibilities for all students in order to have a safe, enriching learning environment. Students are expected to grow in their ability to demonstrate co-operation and respect to peers, teachers, and all members of the school community. We provide pressure and support to all students in their academic and personal development. Regular attendance and punctuality is vital to all students' success in an environment of high expectations.

### ***Board's Safe School Policy***

The Rainy River District School Board will foster and maintain a safe environment for its students, staff and community through the implementation of effective measures to deal with violence in schools. These measures include the establishment of preventative procedures, the provision of appropriate early intervention procedures and the administration of disciplinary action in accordance with Board Policy, the Education Act, the Safe Schools Act, the Ontario Schools Code of Conduct and other relevant legislation. The complete policy can be found on the Board website ([www.rrdsb.com](http://www.rrdsb.com)) under Approved Policies 4.16

### ***Student Attendance***

Regular attendance and punctuality are essential components of success in all courses. The detailed procedures of the school attendance policy are available in the Northern Lakes School Student Handbook and Code of Student Behaviour.

### ***Assessment - Evaluation - Reporting***

Assessment and evaluation will be based on the provincial curriculum expectations and the achievement levels outlined in the secondary curriculum documents.

In **Grade 9-12 Assessment**, the final grade for each course will be determined as follows:

Term Work	70%
Final Evaluation	30%

Where a written exam is part of the final evaluation, the exam will be written in the formal exam period. Students attend school to write an exam on a scheduled day and time. Exceptions will only be made for **legal, medical or educational reasons**.

There will be two formal reports each semester: a mid-term and final report. "Parents' Night" will occur at least once per semester. Parents are encouraged to contact teachers at any time should they have concerns regarding their child's achievement.

## **Supports and Resources**

### ***Student Services***

The Northern Lakes School Guidance Department offers assistance to students in the areas of (1) Educational Planning and Course Selection, (2) Career Planning and (3) Personal Development. Students may be seen routinely or by request. Classroom visits also occur for group topics. The Guidance Department maintains a comprehensive file of calendars, videos, and first year view books for post secondary institutions in Ontario. Limited resources are available for the rest of Canada and the United States. Career information is readily available in hard copy and on programs via the Internet. Information on the offering of courses through other means is also available. Students and parents are encouraged to seek the assistance of a counsellor at any time.

### ***Co-operative Education***

Co-operative Education is a career-oriented program designed to integrate classroom theory with practical, meaningful experiences in the workplace. The program is open to all senior students and offers each the opportunity to explore career goals or interests while still in school. The partnership and relationship with community workplaces is vital to the success of the Co-operative Education program. Students must apply, be interviewed and accepted by the co-ordinators prior to being part of the Co-operative Education program.

Co-op allows students to relate classroom instruction to the workplace; observe and operate equipment not available at school; develop job skills; gain practical experience which is essential in today's competitive job market; acquire confidence, self-reliance, appropriate expectations and attitudes in preparation for permanent employment; enhance opportunities for summer work and job placement after graduation, enter apprenticeship and other post-secondary education programs more easily.

Co-op courses are offered to students in grade 11 and 12. Enrolment in Co-operative Education courses is subject to timetable limitations and availability of job placement. Acceptance into the program depends in part upon an interview with the teacher monitor. Grade 9 and 10 students are considered for Co-op on an individual basis.

Evaluation of each participant is a combined effort of the school monitor and workplace supervisor. The evaluation is based on the student's reliability, initiative and ability to work in a practical situation. A student's final mark is a combination of pre-employment orientation assignments, on-the-job performance and assignments, weekly logs, and active participation in a final culminating activity.

### ***OYAP - Ontario Youth Apprenticeship Program***

The Ontario Youth Apprenticeship Program (OYAP) is a specialized program that enables students who are 16 years of age or older to meet diploma requirements while participating in an occupation that requires apprenticeship. This is done through an agreement between the student who wants to learn a skilled trade, the employer who provides the training, the Ministry of Education, the high school and the Ministry of Training, Colleges and Universities.

All students participating in OYAP must:

- Complete sixteen credits towards the OSSD prior to starting the program. An OYAP student earns co-operative credits for work experience in an apprenticeship occupation.
- Be enrolled as full-time students during the program.
- Complete all compulsory credits required for the OSSD.

OYAP is available at all Secondary Schools in the Rainy River District School Board.

Please see a guidance counsellor or co-op teacher for more information.



### ***Computers***

The school maintains Chromebooks for student and use. Software and hardware are updated on a regular basis by the Board technicians and information technology teachers.

### ***Resource Centre***

The Resource Centre is open for study, research, leisure reading, and preparing assignments from 9:00 a.m. to 3:30 p.m. each day. Students can sign out books and research materials. These resources may be renewed unless they have been reserved by another student. Encyclopedia, magazines, and other reference materials may not be signed out, but students may photocopy single copies of articles for research purposes. The computers have software programs, on-line databases, Internet access and printers available for student use. The Resource Centre staff is available to help students research, find materials and prepare assignments.

### ***Community Resources***

**The School works with community partners on an ongoing basis. Their support of our students and our programs increases our students' ability to connect what they are learning to real life. Many of our community partners bring services to our students to assist them with personal and family issues that may affect their well-being and ability to succeed in school.**

**A few of our community partners are:**

- AHS Parents' and School Council
- Co-op Education Work Placements
- Local Industry and Businesses
- Child and Family Services
- Atikokan Native Friendship Centre
- Atikokan Community Counselling
- Firefly
- Community Living Atikokan
- Ministry of Natural Resources
- Atikokan Economic Development
- Northwestern Health Unit
- Shelter of Hope
- Township of Atikokan

## **INTERVENTION STRATEGIES**

### ***Guidance and Student Success Teachers***

When students are experiencing difficulties achieving success in their classes, the guidance counsellor or student success teacher meets with them. Timetable adjustments, time management strategies, homework tracking, daily reports to parents, and attendance tracking are some of the areas of assistance offered. Every effort is made to help the student attain the skills and assistance necessary to be successful.

### ***Credit Recovery Program***

Should a student fail a credit, teachers are asked to identify the expectations that were not met and areas of weakness that the student must improve on. If the teacher feels that the student is motivated and can work independently, they may recommend him/her for the Credit Recovery Program. Credit Recovery allows the student to complete a defined package of work to earn back the credit without repeating the entire course. Credit Recovery is offered throughout the school year and during the summer (if there are enough students).

### ***Attendance Counsellor***

The Board employs Provincial Attendance Counsellors to assist families and students in maintaining regular

attendance. The Ministry of Education mandates that students attend school and be involved in school programming until age 18. The attendance counsellor connects with families of students who are not in compliance with the policies supporting this law. Families are given strategies, encouragement, community support, and alternative programming where needed to keep their children in school.

### ***Student Learning Centre***

The Student Learning Centre is an alternative education classroom that was established to provide an option for students whose educational needs cannot be met in the regular day school program. Students take individualized programs to complete their diploma requirements. Adults in the community who wish to complete their OSSD are able to take Independent Learning courses through this program with workspace provided at the Atikokan Adult Learning Centre located at 25 Rawn Road.

### **Timetable Changes**

Student options sheets are used in determining the courses that will be offered to all students in the next school year. Students must take the process of choosing courses very seriously. Research into the courses they require to go on to apprenticeship, college, university and other post-secondary training must be done prior to selecting their courses for their senior years.

Changes to course selection will only be made in the following instances:

- (1) The timetable is unacceptable due to course(s) omitted or improper sequencing of courses.
- (2) Failure of a compulsory course in Semester I or changes in career plans (post secondary prerequisites).

Whenever students are allowed to change courses, every effort is made to retain the coherence of their programs as well as the other characteristics involved in the initial planning.

As with original course selections, all course changes by students under the age of majority must also receive parental approval.

**\*\*COURSE CHANGES MUST BE MADE WITHIN DEADLINES SET BY THE GUIDANCE OFFICE\*\***

### **Special Education**

A student may be referred to Special Education services by a parent, teacher, or principal when it is apparent that the student is not being successful with routine interventions. Special Education Services encompass the facilities, resources and programs, including support personnel, equipment and assistive technology, necessary for developing and implementing an Individual Education Plan for each identified student. A wide range of services are provided to the student through Special Education to assure that each student receives the best possible educational program to suit his/her needs and abilities. There are several ways that assistance is offered to the student:

1. ***Assessments and Consultative services*** with professionals from the region for parents and students when determining if the student has exceptionality and how that exceptionality can be addressed by the school.
2. ***Accommodations*** are the differentiated teaching and assessment strategies that allow a student to demonstrate their learning. The student is working toward the same expectations of the course and attains the same credit.

3. **Modifications** occur when the expectations of the course cannot be met by the student due to their exceptionality. The student works toward mastering material at their given academic level. The student works toward the improvement of his/her skills in the subject area until he/she is able to work at the grade level expectations.
4. **Life Skills Courses** provide the student with practical experiences, with a focus on independence, to prepare him/her for community living following high school. These courses offer vital social skills to the student who may not have the opportunity to attain an OSSD. These courses are not for credit. Students work towards a certificate of accomplishment.
5. **Individual Education Plans** are developed with teachers to be able to identify the specific exceptionality of the student, goals for the school year, and accommodations required for classroom success.
6. **The Identification, Placement and Review Committee (IPRC)** process allows for the parent, student, teachers, Special Education Resource Teacher, and principal to meet to discuss the uniqueness of the student, any next steps for assessments and goal setting, and course selection and programming for the upcoming school year.
7. **The Special Education Advisory Committee** is a Board committee where parents can have input into how the Special Education Services are provided to the students of the Board. This committee seeks out parental involvement in its membership.

For more information on Special Education Services please visit [www.rrdsb.com](http://www.rrdsb.com) or contact the Special Education Resource teacher at the school.

## **Prior Learning Assessment and Recognition (PLAR)**

### **Challenging a Course:**

Students may receive a credit without taking a course if they can demonstrate that they have the knowledge, skills, and competencies from prior learning to meet the expectations for the course set out in the provincial curriculum policy documents. To receive a credit through the PLAR process, assessment and evaluation is based on all the strands in a course and the achievement charts for the course that appear in the curriculum document.

### *Important things to note:*

- The PLAR process applies only to courses in Grade 10-12.
- Students may obtain a maximum of four credits through the PLAR process; no more than two in one subject area.
- Students can not challenge a course that they have already attempted.
- The course must be one that is currently taught within the schools operated by the Board.
- Students must go through a formal application process with the principal and meet strict criteria to be considered.
- Students must provide reasonable evidence to the principal that they are likely to be successful in the challenge process, in accordance with the curriculum established by the Ministry of Education.
- Students must submit a detailed application package to the school principal by June 1<sup>st</sup> of the year prior to the challenge. For more information, inquire at the school for Board Procedure 5.76.

### **Equivalent Credit Status**

Students who transfer to a public secondary school from a non-inspected private school or from a school outside of Ontario are granted equivalent credits by the principal upon registration. The principal will determine the total credit equivalency of the student's previous learning, and the number of compulsory and optional credits still to be earned. The equivalency status will be recorded on the Ontario Student Transcript.

## COURSE CODES AND TITLES SUMMARY FOR 2022-2023

### LEGEND

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

### GRADE 9-10

D = Academic  
P = Applied  
L = Locally Developed  
O = Open

### GRADE 11-12

U = University Preparation  
C = College Preparation  
M = University/College Preparation  
E = Employment Workplace Preparation  
O = Open

### THE ARTS

AMU10 Music  
AMU20 Music  
AMU30 Music  
AMU4E Music

### CANADIAN AND WORLD STUDIES

#### GEOGRAPHY

CGC1D Issues in Canadian Geography  
CGR4M Environment and Resource Management: Dendrology, Wildlife and Natural Resources Technology (NRT)

#### INTERDISCIPLINARY STUDIES

IDC4O Fisheries, Wetland Management, and Natural Resources Technology (NRT)

### HISTORY

CHC2D Canadian History since World War I  
CHC2P Canadian History since World War I  
CHC2L Canadian History  
CHV2O Civics and Citizenship (1/2 credit)  
CHY4U World History since the 15<sup>th</sup> Century  
CHY4C World History since the 15<sup>th</sup> Century

### ENGLISH

ENG1D	English	ENG1L	English		
ENG2D	English	ENG2P	English	ENG2L	English
NBE3U	English	NBE3C	English	NBE3E	English
ENG4U	English	ENG4C	English	ENG4E	English

### FRENCH

FSF1D French  
FSF2D French  
FSF3U French  
FSF4U French

### GUIDANCE AND CAREER EDUCATION

GLC20 Career Studies (1/2 credit)

### HEALTH AND PHYSICAL EDUCATION

PPL1O Healthy Active Living Education  
PPL2O Healthy Active Living Education  
PPL3O Healthy Active Living Education  
PAD3O Outdoor Activities- OUTERS  
PPL4O Healthy Active Living Education  
PSK4U Introductory Kinesiology

### MATHEMATICS

MTH1W	Mathematics	MAT1L	Mathematics		
MPM2D	Principles of Mathematics	MFM2P	Foundations of Mathematics	MAT2L	Mathematics
MCR3U	Functions	MBF3C	Foundations for College Mathematics		
MHF4U	Advanced Functions	MCV4U	Calculus and Vectors		

**NATIVE STUDIES**

NAC10 Expressing Aboriginal Cultures (Fine Arts)

**SCIENCE**

SNC1W Science  
SNC2D Science                      SNC 2P Science                      SNC 2L Science  
SBI3U Biology  
SBI3C Biology  
SCH3U Chemistry  
SPH3U Physics  
SPH4C Physics  
SBI4U Biology  
SCH4U Chemistry

**SOCIAL SCIENCES AND THE HUMANITIES**

HSP3M Introduction to Anthropology, Psychology & Sociology

**TECHNOLOGICAL EDUCATION**

TIJ1O Exploring Technologies (shop/NRT rotation)  
TCJ2O Construction Technology  
TFJ2O Hospitality and Tourism (Foods)  
TFJ3C Hospitality- Dual credit through Confederation College  
TFR4C Culinary Arts and Management (Foods)  
TCJ3C Construction Engineering Technology  
TCJ4C Construction Technology  
TTJ2O Transportation Technology  
TTJ3C Transportation Technology  
TTJ4E Transportation Technology

**CO-OPERATIVE EDUCATION**

Co-op Career Exploration  
OYAP Ontario Youth Apprenticeship Program

## **GRADE 9 & 10 PROGRAM INFORMATION**

### **TYPES OF COURSES IN GRADE 9 & 10:**

In disciplines such as the arts, healthy active living, technology, and business studies all students will take the same type of course called an **open course**. In the core subjects, grade 9 courses are de-streamed. This means that students will no longer choose between academic and applied levels for their core courses. Grade 10 students will choose between different types of courses – **academic, applied, or locally developed**. Core courses for grade 9 and 10 are: English, Mathematics, Science, French, Geography and History.

### **De-streamed Courses**

In a de-streamed course, students are not divided into applied or academic pathways.

### **Academic Courses**

In an academic course, students will learn the essential concepts of a subject and explore related material as well. Although knowledge and skills in the subject will be developed through both theory and practical applications, the emphasis will be on theory and abstract thinking as a basis for future learning and problem solving. Students in the academic program should be self directed learners willing to complete homework. Report card learning skills should be at the good or excellent level and students should be working consistently at a level 3 or above.

### **Applied Courses**

An applied course covers the essential concepts of a subject. Knowledge and skills will be developed through both theory and practical applications, but the focus will be on practical applications. In applied courses, familiar, real-life situations will be used to illustrate ideas, and more opportunities will be given to experience hands-on applications of the concepts studied. Students in this program are generally more dependent learners that require greater direction and support from the teacher.

### **Open Courses**

Some subjects only offer courses at the Open level. These courses are open to any student to take. They are designed to prepare students for further study in a subject and to enrich their education generally. Open courses have a set of expectations that are appropriate for all students.

### **Locally Developed Courses**

These courses may be offered to students who have experienced significant difficulties in previous study. These courses provide an opportunity to obtain sufficient background and skill development to prepare students for “Workplace Preparation” courses.

### **Explanation of Course Codes**

Each course has a five-character identification code. The first three characters refer to the subject, the fourth character refers to the grade or level of proficiency and the fifth character refers to the type of course.

D - Academic	e.g. SNC2P is Grade 10 Applied Science
P - Applied	SNC - Science
O - Open	2 - Grade 10
L – Locally Developed	P – Applied
W – De-streamed	

### **Transfer Courses**

The purpose of transfer courses is to enable students who alter their post secondary plans to transfer from one type of course to another between grades 10, 11, and 12. Transfer courses are designed to provide the knowledge and skills required to bridge the gap between two courses of different types. In most cases, transfer courses are shorter and more focussed than other types of courses and can be delivered in a variety of ways.

### **Prerequisites**

In order to accomplish outcomes and objectives, many courses are studied in a prescribed sequence. Certain skills are learned in earlier work which are required to understand more advanced work. This is particularly true in studying Languages, Mathematics, Science and Canadian and World Studies. Students must be successful in the prerequisite course prior to being admitted into courses at a higher level. ***All prerequisites are listed in bold and italics in the Course Descriptions.***

***Crossover Materials*** - When a student plans to switch from one course type in Grade 9 to the other Grade 10 in the same subject, the student will be strongly encouraged to successfully complete additional course work. Up to 30 hours of work, as defined by the Ministry of Education, is required in order to demonstrate achievement of the learning expectations that are included in the one Grade 9 course and not the other.

## **COURSE DESCRIPTIONS AND PREREQUISITES**

Parents and students can access course outlines and all Ontario Curriculum Policy documents on the Ministry of Education website: <http://www.edu.gov.on.ca/eng/curriculum/secondary/>

## **GRADE 10**

### **ARTS**

#### **AMU20 - Music, 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.

## **CANADIAN & WORLD STUDIES**

### **HISTORY**

#### **CHC2D - CANADIAN HISTORY SINCE WORLD WAR I, 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.

#### **CHC2P - CANADIAN HISTORY SINCE WORLD WAR I, 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.

#### **CHC2L - CANADIAN HISTORY SINCE WORLD WAR I, Grade 10, Locally Developed**

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.

#### **CHV2O - CIVICS AND CITIZENSHIP, Grade 10, Open, half 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.

### **ENGLISH**

#### **ENG2D - ENGLISH, 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 analyze literary texts from contemporary and historical periods, interpret and evaluate informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on the selective use of strategies that contribute to effective communication. This course is intended to prepare students for the compulsory Grade 11 university or college preparation course. *Prerequisite: English, Grade 9, Academic or Applied*



### **ENG2L - ENGLISH, Grade 10, Locally Developed**

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

### **ENG2P - ENGLISH, 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 secondary school and daily life. Students will study and create a variety of informational, literary, and graphic texts. An important focus will be on the consolidation of strategies and processes that help students interpret texts and communicate clearly and effectively. This course is intended to prepare students for the compulsory Grade 11 college or workplace preparation course.

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

## **FRENCH**

### **FSF2D - FRENCH, Grade 10, Academic**

This course enables students to increase their knowledge of the French language, further develop their language skills, and deepen their understanding and appreciation of francophone culture around the world. Exploring a variety of themes, students will develop and apply critical thinking skills in discussion, in their analysis and interpretations of texts, and in their own writing. ***Prerequisite: French, Grade 9 Academic or Applied***

## **GUIDANCE & CAREERS**

### **GLC2O - CAREER STUDIES, Grade 10, Open**

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

## **MATHEMATICS**

### **MAT2L - MATHEMATICS, Grade 10, Locally Developed**

This course emphasizes the extension of mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, and in the Mathematics Grade 11 and 12 Workplace Preparation Courses. The course is organized by three strands related to money sense, measurement, and proportional reasoning. In all strands, the focus is on strengthening and extending key foundational mathematical concepts and skills by solving authentic, everyday problems. Students have opportunities to extend their mathematical literacy and problem-solving.

**MF2P - FOUNDATIONS OF MATHEMATICS, Grade 10, Applied**

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

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

**MP2D - PRINCIPLES OF MATHEMATICS, 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 triangle. Students will reason mathematically as they solve multi-step problems and communicate their thinking.

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

**HEALTH AND PHYSICAL EDUCATION****PPL2O - HEALTHY ACTIVE LIVING EDUCATION, Grade 10, Open**

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

**SCIENCE****SNC2D - SCIENCE, Grade 10, Academic**

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

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

**SNC2P - SCIENCE - 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:** *Science, Grade 9, Academic or Applied*

**SNC2L - SCIENCE - Grade 10, Locally Developed**

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

**TECHNOLOGICAL EDUCATION****TIJ10 - EXPLORING TECHNOLOGIES**

This course enables students to further explore and develop technological knowledge and skills introduced in the elementary science and technology program. Students will be given the opportunity to design and create products and/or provide services related to the various technological areas or industries, working with a variety of tools, equipment, and software commonly used in industry. Students will develop an awareness of environmental and societal issues, and will begin to explore secondary and postsecondary education and training pathways leading to careers in technology-related fields. **Prerequisite: None**

**TCJ201 - CONSTRUCTION TECHNOLOGY**

This course introduces students to building materials and processes through opportunities to design and build various construction projects. Students will learn to create and read working drawings; become familiar with common construction materials, components, and processes; and perform a variety of fabrication, assembly, and finishing operations. They will use a variety of hand and power tools and apply knowledge of imperial and metric systems of measurement, as appropriate. Students will develop an awareness of environmental and societal issues related to construction technology and will explore secondary and postsecondary pathways leading to careers in the industry. **Prerequisite: None**

**TTJ20 - TRANSPORTATION TECHNOLOGY, Grade 10, Open**

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

**Prerequisite: None**

## GRADE 11 AND 12 PROGRAM INFORMATION

### TYPES OF COURSES IN GRADE 11 & 12 COURSES:

**NOTE:** *College and universities have specific subject requirements to gain entry. Check these requirements carefully with your Guidance Counsellor.*

**University preparation courses** are designed to equip students with the knowledge and skills they need to meet the entrance requirements for university programs.

**University/college preparation courses** are designed to equip students with the knowledge and skills they need to meet the entrance requirements for specific programs offered at universities and colleges.

**College preparation courses** are designed to equip students with the knowledge and skills they need to meet the requirements for entrance to most college programs or for admission to apprenticeship or other training programs.

**Workplace preparation courses** are designed to equip students with the knowledge and skills they need to meet the expectations of employers, if they plan to enter the workplace directly after graduation, or the requirements for admission to certain apprenticeship or other training programs.

**Open courses** are designed to broaden students' knowledge and skills in subjects that reflect their interests and to prepare them for active and rewarding participation in society. They are not designed with the specific requirement of universities, colleges, or the workplace in mind.

### EXPLANATION OF COURSE CODES FOR GRADE 11 & 12

The subject code has 5 or 6 characters - 3 letters (subject code), 1 digit (grade level), 1 letter (level of instruction) and an optional letter "C" for a co-operative education course, "S" for single credit technology courses, "D" for double credit technology course, "F" for en Français.

U -	University preparation	i.e.	SPH3U is Grade 11 Physics (University Preparation)
M -	University/college preparation		SPH - Physics
C -	College preparation		3 - Grade 11
E -	Workplace Preparation		U - University Preparation
O -	Open		

Course Profiles are available on the Internet at [www.curriculum.org](http://www.curriculum.org)

## **E-LEARNING COURSES**

**Northern Lakes School, Fort Frances High School, and Rainy River High School** offer a number of different courses that students can take through e-learning. Students may also take an e-learning course offered through another board in Ontario. These courses are offered **completely online** and students do all assignments on a computer. Although a teacher in the Board is assigned to each course, the students are not necessarily in the room with the teacher offering the course. Each course is part of a student's timetable, and there is a location at the school from which the student must work.

If you are considering taking an e-learning course, you need to be familiar with the following:

- a. Any student taking an e-learning course should have access to a computer after school hours. The computer needs to have the ability to work in the software required by the course. Students need to be comfortable with working on a computer. Students may use their Chromebooks or personal devices.
- b. Students need to understand that they will need to do homework in these courses if they hope to keep up with the course.
- c. Students need to be able to set a work schedule for themselves that involves at least 60-75 minutes each school day, with the understanding that, depending on the course, they may have to do 30 minutes or more of homework most nights.
- d. Students need to be able to work unsupervised and have the ability to problem solve for themselves. Sometimes, the teacher in charge of the course will not be available at the same time that the student is working on the course. As such, feedback on questions is not instantaneous and students will need to work on other parts of the course while they wait for help or further instructions from their teacher.
- e. Students should have strong reading skills. Although many courses involve video components, hands on activities and audio feeds, much of the course is in written form. Students will have to read many notes, background information, instructions, etc. so that they can complete the activities that make up each unit.
- f. E-learning courses pose different challenges than a regular class, but have the advantage of being offered in all periods and draw on teacher expertise across the Board. Students need to be willing to rise to the challenge to complete the course. It can be very rewarding to complete a course through e-learning, but the courses are demanding and aren't necessarily for every student. If you are considering taking a course through this method, ask questions of your guidance counsellor to make sure that you can be successful.

Course offerings will be finalized after the receipt of option sheets. This mode of course delivery offers students the opportunity to take courses that would not be offered due to low enrolment or conflict with other courses the students need. **Beginning with students who entered grade 9 in the 2020-2021 school year, all students must earn at least two online learning credits as part of the requirements for an Ontario Secondary School Diploma (OSSD), unless they have opted out or been exempted. Opt-out forms are available at Northern Lakes School.**

## **STUDENT SUCCESS INITIATIVES**

### **DUAL CREDITS**

All students deserve a good outcome from their high school experience. Dual credit programs provide opportunities for high school students to receive high school credits and college credits concurrently. Dual credit programs allow students to “reach ahead” and experience success in a Confederation College credit course while still in high school. Industry recognized certifications are an integral component of dual credit programs. These courses provide students with a clear pathway to college programs or the world of work. This program is supported by the Ministry of Education through the School College Work Initiative and is one of the Six Ways to Succeed in High School.

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

This specialized program is designed for senior level students that have a career path in mind that matches their interests and skills. Each major consists of a bundle of 8-10 courses; as well as compulsory and optional industry recognized certifications. The five core components of a high skills major are: specialized bundle of required courses with contextualized learning activities, sector specific certifications, experiential learning opportunities, “reach ahead” opportunities, and development of essential skills and work habits using the Ontario Skills Passport (OSP).

This program is open to all students. Benefits of this program are it allows students to see the connection between school and post secondary studies or the workplace. It provides them with opportunities to begin networking with potential employers while still in high school. Students who enroll then choose not to complete the SHSM are able to use the credits obtained while in the SHSM towards their OSSD requirements. This program is supported by the Ministry of Education and is one of the Six Ways to Succeed in High School.

Northern Lakes School will be offering a SHSM in the Environment and Hospitality sectors for 2022-2023. Below is the bundle of courses required to achieve the SHSM upon graduation, in each pathway.

### **ENVIRONMENTAL**

Categories of Required Credits	Apprenticeship Training Destination		College Destination		Workplace Destination		University Destination	
	Grade 11	Grade 12	Grade 11	Grade 12	Grade 11	Grade 12	Grade 11	Grade 12
<b>Major Credits</b> Any two of the following:	CGT 30 NBV3E SBI 3C SNV 3E	CGR 4E SCH 4C	CGF 3M SBI 3C	CGO 4M SCH 4C CGR 4M	CGG 3O CGT 3O PAD 3O SVN 3E	CGR 4E PAD 4O	CGF 3M SBI 3U PAD 3O SCH 3U	CGR 4M SBI 4U CGO 4M SCH 4U SNC 4M
<b>English</b>	ENG 3C	ENG 4C	ENG 3C	ENG 4C	ENG 3E	ENG 4E	ENG 3U	ENG 4U
<b>Math</b>	MEL 3E MBF 3C		MBF 3C		MEL 3E		MCR 3U	
<b>Co-operative Education Credits</b>	2 credits in either gr. 11 or 12		2 credits in either gr. 11 or 12		2 credits in either gr. 11 or 12		2 credits in either gr. 11 or 12	
<b>Total # of credits Required for Environment Major</b>	9		9		9		9	

**HOSPITALITY**

Categories of Required Credits	Apprenticeship Training Destination		College Destination		Workplace Destination		University Destination	
	Grade 11	Grade 12	Grade 11	Grade 12	Grade 11	Grade 12	Grade 11	Grade 12
<b>Major Credits</b> Any two of the following:	TFJ3C	TFR4C	TFJ3C	TFR4C	TFJ3C BMX3E	TFR4C	TFJ3C	TFR4C BOH 4M CGW4U
<b>English</b>	ENG 3C	ENG 4C	ENG 3C	ENG 4C	ENG 3E	ENG 4E	ENG 3U	ENG 4U
<b>Math</b>	MEL 3E MBF 3C		MBF 3C		MEL 3E		MCR 3U	
<b>Co-operative Education Credits</b>	2 credits in either gr. 11 or 12		2 credits in either gr. 11 or 12		2 credits in either gr. 11 or 12		2 credits in either gr. 11 or 12	
<b>Total # of credits Required for Hospitality Major</b>	9		9		9		9	

These are the recommend pathway courses for students enrolled in the SHSM. Please note that a student may use major courses from other pathways in order to meet the major credit requirement of the SHSM.

**GRADE 11 AND 12****ARTS****AMU30 - Music, 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 analyze music from various genres and periods, and they will develop skills transferable to other aspects of their life and their careers.

**CANADIAN & WORLD STUDIES****GEOGRAPHY****CGR4M - ENVIRONMENT AND RESOURCE MANAGEMENT, Grade 12, University/College Prep**

This course explores interactions between the natural and human environment, with a particular focus on the impact of human activity on various ecosystems. Students will explore resource management and sustainability practices, as well as related government policy and international protocols. Applying the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, students will investigate the relationship between people and the natural environment and will propose approaches for developing more sustainable relationships, including environmentally responsible actions that support stewardship.

**Pre-requisite:** Any U, U/C, or C preparation course in Canadian and World Studies, English, or Social Sciences and Humanities

***Dendrology, Wildlife and Natural Resources Technology***

This course will blend a local Natural Resources Technology theme with hands-on practical work into the interdisciplinary studies curriculum. It involves the study several disciplines that are an integral part of northern life. Students will be actively engaged in their learning as emphasis will be given to practical research techniques and hands on experience. Students will learn about key components of the north's economy, ecology, and culture by studying the following: dendrology, wildlife biology and management, photography, taxidermy, forest inventory and mapping, snow ecology, etc.

**HISTORY****CHY4U - WORLD HISTORY SINCE THE 15<sup>th</sup> CENTURY, 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 assess societal progress or decline in world history.

***Prerequisite: Any U, C, or M course in Canadian and World Studies, English, or Social Sciences and Humanities***

**CHY4C - WORLD HISTORY SINCE THE 15<sup>th</sup> CENTURY, Grade 12, College**

This course explores key developments and events in world history since approximately 1450, with a focus on interactions within and between various regions. Students will examine social, economic, and political developments and how they have affected different peoples. 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 key turning points in world history and historical forces that have shaped our world.

***Prerequisite: Any U, C, or M course in Canadian and World Studies, English, or Social Sciences and Humanities***

**ENGLISH****NBE3U – ENGLISH: Understanding Contemporary First Nation, Metis and Inuit Voices, Grade 11, University Preparation**

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 self-governance, students will analyze 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. ***Prerequisite: English, Grade 10, Academic***



**NBE3C - ENGLISH: Understanding Contemporary First Nation, Metis and Inuit Voices, Grade 11, College Preparation**

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: English, Grade 10, Applied*

**NBE3E - ENGLISH: Understanding Contemporary First Nation, Metis and Inuit Voices, Grade 11, Workplace Preparation**

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will study the content, form, and style of a variety of contemporary informational, graphic, and literary texts; and create oral, written, and media texts in a variety of forms for practical purposes. An important focus will be on using language clearly and accurately in a variety of formal and informal contexts. The course is intended to prepare students for the compulsory Grade 12 workplace preparation course. *Prerequisite: English, Grade 10, Applied or English, Grade 10, Locally Developed*

**ENG4U - ENGLISH, Grade 12, University Preparation**

This course emphasizes the consolidation of the literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. An important focus will be on using academic language coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. The course is intended to prepare students for university, college, or the workplace. *Prerequisite: English, Grade 11, University Preparation*

**ENG4C - ENGLISH, Grade 12, College Preparation**

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze a variety of informational and graphic texts, as well as literary texts from various countries and cultures, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity and developing greater control in writing. The course is intended to prepare students for college or the workplace. *Prerequisite: English, Grade 11, College Preparation*

**ENG4E - ENGLISH, Grade 12, Workplace Preparation**

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will analyze informational, graphic, and literary texts and create oral, written, and media texts in a variety of forms for workplace-related and practical purposes. An important focus will be on using language accurately and organizing ideas and information coherently. The course is intended to prepare students for the workplace and active citizenship. *Prerequisite: English, Grade 11, Workplace Preparation*

## **FRENCH**

### **FSF3U - FRENCH**

This course draws on a broad theme, such as leisure activities, to develop oral communication, reading, and writing skills. Students will give presentations, read a selection of short stories and articles, and produce a variety of written assignments. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course. ***Prerequisite: Core French, Grade 10, Academic***

### **FSF4U - FRENCH**

This course draws on a variety of themes to promote extensive development of French- language skills. Students will consolidate their oral skills as they discuss literature, culture, and current issues. They will read a variety of texts and will write a formal essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course. ***Prerequisite: Core French, Grade 11, Academic***

## **HEALTH AND PHYSICAL EDUCATION**

## **FEMALE/MALE**

### **PAD30 - OUTDOOR ACTIVITIES – OUTERS, Grade 11, Open**

An outdoor adventure programme designed to present physical and emotional challenge beyond what the average individual encounters in everyday experiences. The purpose of this program is to develop confidence and reliance in oneself, while at the same time demonstrating the importance of creating strong interpersonal relationships and a teamwork approach toward overcoming adversity. (SENIOR LEVEL ONLY)

### **PPL30 - HEALTHY ACTIVE LIVING EDUCATION, Grade 11, Open**

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

### **PPL40 - HEALTHY ACTIVE LIVING EDUCATION, Grade 12, Open**

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

***To cover the rental of community facilities for the Grade 11 and 12 program, nominal fees will be collected from each student at the beginning of the units involved. Time requirements may be extended slightly to make the use of community facilities worthwhile.***

**PSK4U - INTRODUCTORY KINESIOLOGY, Grade 12, University Preparation**

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

**INTERDISCIPLINARY STUDIES****IDC4O - INTERDISCIPLINARY STUDIES, Grade 12, Open**

This course will blend a local Natural Resources Technology theme with hands-on practical work into the interdisciplinary studies curriculum.

***Fisheries, Wetland Management and Natural Resources Technology (Semester 2)***

This course will blend a local Natural Resources Technology theme with hands-on practical work into the interdisciplinary studies curriculum. IDC4O - NRT incorporates the study of a number of different disciplines. Emphasis will be on how each discipline is related/interconnected on a local and global scale. Students will be actively engaged in a variety of different research techniques used in the different disciplines of the course. Students will also learn about and get experience with numerous career possibilities which stem from the course content. Students will be working in the following fields: biology, ornithology, horticulture, fisheries, forestry, bathymetry, taxidermy, photography, tourism, entrepreneurship, aviation, and firefighting. **Prerequisite: None**

**MATHEMATICS****MCR3U - FUNCTIONS, Grade 11, University Preparation**

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

**Prerequisite: Principles of Mathematics, Grade 10, Academic**

**MBF3C - FOUNDATIONS FOR COLLEGE MATHEMATICS, Grade 11, College Preparation**

This course enables students to broaden their understanding of mathematics as a problem-solving tool in the real world. Students will extend their understanding of quadratic relations, 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, analyzing, and evaluating data involving one and two variables. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. **Prerequisite: Foundations of Mathematics, Grade 10, Applied**

**MCV4U - CALCULUS AND VECTORS, Grade 12, University Preparation**

This course builds on students' previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors, and representations of lines and planes in three-dimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, rational, exponential, and sinusoidal functions; and apply these concepts and skills to the modeling of real-world relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who plan to study mathematics in university and who may choose to pursue careers in fields such as physics and engineering.

***Prerequisite: Advanced Functions, Grade 12, University Preparation.***

***Note: In some schools, it may be necessary to take the prerequisite course concurrently with MCV4U.***

**MDM4U – MATHEMATICS OF DATA MANAGEMENT, Grade 12, University Preparation**

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

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

**MHF4U - ADVANCED FUNCTIONS, Grade 12, University Preparation**

This course extends students' experience 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: Functions, Grade 11, University Preparation, or Mathematics for College Technology, Grade 12, College Preparation***

**MAP4C - FOUNDATIONS FOR COLLEGE MATHEMATICS, Grade 12, College Preparation**

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

***Prerequisite: Foundations for College Mathematics, Grade 11, College Preparation***

**SCIENCE****SBI3U - BIOLOGY, Grade 11, University Preparation**

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

***Prerequisite: Science, Grade 10, Academic***

**SBI3C - BIOLOGY, Grade 11, College Preparation**

This course focuses on the processes that occur in biological systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, genetics, the anatomy of mammals, and the structure of plants and their role in the natural environment. Emphasis will be placed on the practical application of concepts, and on the skills needed for further study in various branches of the life sciences and related fields. *Prerequisite: Science, Grade 10, Academic or Applied*

**SCH3U - CHEMISTRY, Grade 11, University Preparation**

This course enables students to deepen their understanding of chemistry through the study of the properties of chemicals and chemical bonds; chemical reactions and quantitative relationships in those reactions; solutions and solubility; and atmospheric chemistry and the behaviour of gases. Students will further develop their analytical skills and investigate the qualitative and quantitative properties of matter, as well as the impact of some common chemical reactions on society and the environment. *Prerequisite: Science, Grade 10, Academic*

**SPH3U - PHYSICS, Grade 11, University Preparation**

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

*Prerequisite: Science, Grade 10, Academic*

**SBI4U - BIOLOGY, Grade 12, University Preparation**

This course provides students with the opportunity for in-depth study of the concepts and processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biochemistry, metabolic processes, molecular genetics, homeostasis, and population dynamics. Emphasis will be placed on the achievement of detailed knowledge and the refinement of skills needed for further study in various branches of the life sciences and related fields. *Prerequisite: Biology, Grade 11, University Preparation*

**SCH4U - CHEMISTRY, Grade 12, University Preparation**

This course enables students to deepen their understanding of chemistry through the study of organic chemistry, the structure and properties of matter, energy changes and rates of reaction, equilibrium in chemical systems, and electrochemistry. Students will further develop their problem-solving and investigation skills as they investigate chemical processes and will refine their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in everyday life and on evaluation of the impact of chemical technology on the environment. *Prerequisite: Chemistry, Grade 11, University Preparation*

**SCH4C - CHEMISTRY, Grade 12, College Preparation**

This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment. Students will use a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment.

## **SOCIAL SCIENCES AND THE HUMANITIES**

### **HSP3U/C - INTRODUCTION TO ANTHROPOLOGY, PSYCHOLOGY, AND SOCIOLOGY, Grade 11, University/College Preparation**

This course explores the general theories, questions, assumptions, and issues that form the basis of study for anthropology, psychology, and sociology. Methods of research and approaches used by social scientists in examining topics of study will be examined and employed by students. Opportunities to explore theories from a variety of perspectives with a focus on classical and contemporary approaches used by social scientists in the three disciplines will be presented to the students. Students will be encouraged to apply these skills to a wide range of issues that impact society and to critically examine current thinking on these issues. They will also learn to develop and support a thesis, conduct research and analysis, and effectively communicate the results of their inquiries.

***THE GRADE 11 HSP3U/C : Introduction to Anthropology, Psychology and Sociology WILL BE OFFERED EVERY SECOND YEAR, rotating with CHW3M.***

## **TECHNOLOGICAL EDUCATION**

### **TFJ3C1 - HOSPITALITY, Grade 11, College, DUAL CREDIT (Confederation College)**

This course enables students to develop or expand knowledge and skills related to hospitality and tourism, as reflected in the various sectors of the tourism industry. Students will learn about preparing and presenting food, evaluating facilities, controlling inventory, and marketing and managing events and activities, and will investigate customer service principles and the cultural and economic forces that drive tourism trends. Students will develop an awareness of health and safety standards, environmental and societal issues, and career opportunities in the tourism industry. **Prerequisite: None. However, TFJ 20 is strongly recommended by the teacher.**

### **TFR4C1 - CULINARY ARTS AND MANAGEMENT, Grade 12, College, DUAL CREDIT (Confederation College)**

This course enables students to acquire advanced cooking skills, along with the knowledge and skills needed to manage a variety of commercial food services and businesses.

### **TCJ3C1 - CONSTRUCTION ENGINEERING TECHNOLOGY, Grade11, College Preparation**

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 will explore career opportunities in the field.

### **TCJ4C1 - CONSTRUCTION ENGINEERING TECHNOLOGY, Grade12, College Preparation**

This course enables students to further develop knowledge and skills related to residential construction and to explore light commercial construction. Students will gain hands-on experience using a variety of materials, processes, tools, and equipment, and will learn more about building design and project planning. They will continue to create and interpret construction drawings and will extend their knowledge of construction terminology and of relevant building codes and regulations, as well as health and safety standards and practices. Students will also focus on environmental and societal issues related to construction engineering technology and will explore career opportunities in the field.

**TTJ3C - TRANSPORTATION TECHNOLOGY, Grade 11, Workplace**

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

**Prerequisite:** None. However, TTJ 20 is strongly recommended by the teacher.

**TTJ4E - TRANSPORTATION TECHNOLOGY, Grade 11, Workplace**

This course introduces students to the servicing, repair, and maintenance of vehicles through practical applications. The course is appropriate for all students as a general interest course to prepare them for future vehicle operation, care, and maintenance or for entry into an apprenticeship in the motive power trades. Students will develop an awareness of environmental and societal issues related to transportation and will learn about careers in the transportation industry and the skills and training required for them. **Prerequisite:** None

Visit the Northern Lakes School website: [www.ahs.rdsb.com](http://www.ahs.rdsb.com)

**COLLEGE AND UNIVERSITY APPLICATION CENTRES & PROGRAM FINDERS**

**Ontario Universities Application Centre**

[www.ouac.on.ca](http://www.ouac.on.ca)

**E-Info (University program search engine)**

[www.electronicinfo.ca](http://www.electronicinfo.ca)

**Ontario College Application Centre and Program Search**

[www.ontariocolleges.ca](http://www.ontariocolleges.ca)

**Ontario Public University Addresses and Websites****Brock University**

[www.brocku.ca](http://www.brocku.ca)

500 Glenridge Avenue  
St. Catharines, Ontario L2S 3A1  
Telephone: (905) 688-5550  
Admissions: (905) 688-5550 ext. 4293  
Fax: (905) 688-4283

**Carleton University**

[www.carleton.ca](http://www.carleton.ca)

1125 Colonel By Drive  
Ottawa, Ontario K1S 5B6  
Admissions: (613) 520-3666 or 1-888-354-4414  
Fax: (613) 520-3847

**University of Guelph**

[www.uoguelph.ca](http://www.uoguelph.ca)

50 Stone Road East  
Guelph, Ontario N1G 2W1  
Telephone: (519) 824-4120 ext. 58721  
Admissions: (519) 821-2130  
Fax: (519) 766-9481

**Lakehead University**

955 Oliver Road  
Thunder Bay, Ontario P7B 5E1  
Telephone: 1-800-465-3959  
Admissions: (807) 343-8500  
Fax: (807) 766-7209

[www.lakeheadu.ca](http://www.lakeheadu.ca)

**Laurentian University**

Ramsey Lake Road  
Sudbury, Ontario P3E 2C6  
Telephone: (705) 675-1151 ext. 4843 or  
1-800-4761-4030  
Admissions: (705) 675-1151 ext. 3905  
Fax: (705) 675-4891

[www.laurentian.ca](http://www.laurentian.ca)

**McMaster University**

1280 Main Street West  
Hamilton, Ontario L8S 4L8  
Admissions: (905) 525-4600  
Fax: (905) 527-1105

[www.mcmaster.ca](http://www.mcmaster.ca)

**Nipissing University**

PO Box 5002  
100 College Drive  
North Bay, Ontario P1B 8L7  
Telephone: (705) 474-3450 ext. 4521  
Fax: (705) 495-1772

[www.nipissingu.ca](http://www.nipissingu.ca)

**Ontario College of Art & Design**

100 McCaul Street  
Toronto, Ontario M5T 1W1  
Admissions: (416) 977-6000 ext. 310  
Fax: (416) 977-6006

[www.ocad.on.ca](http://www.ocad.on.ca)

**University of Ontario Institute of Technology**

2000 Simcoe Street North  
Oshawa, Ontario L1H 7L7  
Telephone: (905) 721-3190  
Fax: (905) 721-3178

[www.uoit.ca](http://www.uoit.ca)

**University of Ottawa**

Tabaret Hall  
75 Laurier Ave. E.  
Ottawa, Ontario K1N 6N5  
Telephone (613) 562-5700 or 1-877-868-8292  
Fax: (613) 562-5323

[www.uottawa.ca](http://www.uottawa.ca)



**Queen's University**

99 University Avenue  
Kingston, Ontario K7L 3N6  
Telephone: (613) 533-2200

[www.queensu.ca](http://www.queensu.ca)

**Royal Military College**

Box 17000, Station Forces  
Kingston, Ontario K7K 7B4  
Telephone: (613) 541-6000  
Admissions: (613) 541-6000 ext. 3857 or 1-866-762-2672

[www.rmc.ca](http://www.rmc.ca)

**Ryerson University**

350 Victoria Street  
Toronto, Ontario M5B 2K3  
Telephone: (416) 979-5000  
Admissions: ext. 7271

[www.ryerson.ca](http://www.ryerson.ca)

**Trent University**

PO Box 4800  
Peterborough, Ontario K9J 7B8  
Telephone: (705) 748-1011 or 1-888-739-8885  
Admissions: (705) 748-1215 Fax: (705) 748-1629

[www.trentu.ca](http://www.trentu.ca)

**University of Toronto**

27 King's College Circle  
Toronto, Ontario M5S 1A1  
Admissions: (416) 978-2011

[www.utoronto.ca](http://www.utoronto.ca)

**University of Waterloo**

200 University Avenue West  
Waterloo, Ontario N2L 3G1  
Telephone: (519) 888-4567  
Admissions: (519) 888-4567 ext. 33106

[www.uwaterloo.ca](http://www.uwaterloo.ca)

**University of Western Ontario**

1151 Richmond Street  
London, Ontario N6A 5B8  
Telephone: (519) 661-2111  
Admissions: (519) 661-2100  
Fax: (519) 661-3710

[www.uwo.ca](http://www.uwo.ca)

**University of Windsor**

401 Sunset Avenue  
Windsor, Ontario N9B 3P4  
Telephone: (519) 253-3000  
Registrar: ext. 3315  
Fax: (519) 971-3653

[www.uwindsor.ca](http://www.uwindsor.ca)

**Wilfrid Laurier University**

75 University Avenue West  
Waterloo, Ontario N2L 3C5  
Telephone: (519) 884-1970 Fax: (519) 747-2106  
Admissions: (519) 884-0710 ext. 3385

[www.wlu.ca](http://www.wlu.ca)

**York University**

4700 Keele Street  
North York, Ontario M3J 1P3  
Telephone: (416) 736-5000  
Admissions: (416) 736-5000  
Fax: (416) 736-5536

[www.yorku.ca](http://www.yorku.ca)

**Ontario Colleges of Applied Arts and Technology: Addresses and Websites**

**Algonquin College of Applied Arts and Technology**

1385 Woodroffe Avenue  
Ottawa, Ontario K2G 1V8  
Telephone: (613) 727-4723

[www.algonquincollege.com](http://www.algonquincollege.com)

**Cambrian College of Applied Arts and Technology**

1400 Barrydowne Road  
Sudbury, Ontario P3A 3V8  
Admissions: (705) 566-8101 ext. 7816 or 1-800-461-7145  
Fax: (705) 524-7334

[www.cambriancollege.on.ca](http://www.cambriancollege.on.ca)

**Canadore College of Applied Arts and Technology**

100 College Drive  
PO Box 5001  
North Bay, Ontario P1B 8K9  
Admissions: (705) 474-7600  
Toll Free: 1-855-495-7915  
Fax: (705) 474-2384

[www.canadorec.on.ca](http://www.canadorec.on.ca)

**Centennial College of Applied Arts and Technology**

PO Box 631, Station A  
Scarborough, Ontario M1K 5E9  
Telephone: (416) 289-5000 or 1-800-268-4419  
Admissions: (416) 289-5300

[www.centennialcollege.ca](http://www.centennialcollege.ca)

**Collège Boréal**

21, boulevard LaSalle  
Sudbury, Ontario P3A 6B1  
Telephone: (705) 560-6673 or 1-800-361-6673  
Fax: (705) 560-1511

[www.collegeboreal.ca](http://www.collegeboreal.ca)

**Conestoga College Institute of Technology and Advanced Learning**

299 Don Valley Drive  
Kitchener, Ontario N2G 4M4  
Telephone: (519) 748-5220  
Admissions: (519) 748-5220 ext. 3656  
Fax: (519) 895-1097

[www.conestogac.on.ca](http://www.conestogac.on.ca)

**Confederation College of Applied Arts and Technology**

1450 Nakina Drive, PO Box 398  
Thunder Bay, Ontario P7C 4W1  
Telephone: 1-800-475-6110  
Toll Free: 1-800-465-5493  
Admissions: (807) 475-6213  
Fax: (807) 473-3731

[www.confederationc.on.ca](http://www.confederationc.on.ca)

**Durham College of Applied Arts and Technology**

PO Box 385, 2000 Simcoe Street North  
Oshawa, Ontario L1H 7L4  
Telephone: (905) 721-2000  
Admissions: 905) 721-3000  
Fax: (905) 721-3113

[www.durhamcollege.ca](http://www.durhamcollege.ca)

**Fanshawe College of Applied Arts and Technology**

1001 Fanshawe College Boulevard  
PO Box 7005  
London, Ontario N5Y 5R6  
Telephone: (519) 452-4277  
Fax: (519) 452-4420

[www.fanshawec.ca](http://www.fanshawec.ca)

**George Brown College of applied Arts and Technology**

PO Box 1015, Station B  
500 MacPherson Avenue  
Toronto, Ontario M5T 2T9  
Telephone: (416) 415-2000 or 1-800-265-2002

[www.georgebrown.ca](http://www.georgebrown.ca)

**Georgian College of Applied Arts and Technology**

One Georgian Drive  
Barrie, Ontario L4M 3X9  
Telephone: (705) 722-1511  
Fax: (705) 722-5118

[www.georgianc.on.ca](http://www.georgianc.on.ca)

**Humber College Institute of Technology and Advanced Learning**

205 Humber College Boulevard  
Toronto, Ontario M9W 5L7  
Telephone: (416) 675-6622

[www.humber.ca](http://www.humber.ca)

**La Cité collégiale**

801, promenade de l'Aviation  
Ottawa, Ontario K1K 4R3  
Telephone: (613) 742-2483 or  
1-800-267-2483  
Fax: (613) 742-2481

[www.lacitec.com](http://www.lacitec.com)

**Lambton College of Applied Arts and Technology**

1457 London Road  
Sarnia, Ontario N7S 6K4  
Telephone: (519) 542-7751  
Fax: (519) 541-2426

[www.lambton.on.ca](http://www.lambton.on.ca)

**Loyalist College of Applied Arts and Technology**

PO Box 4200, Wallbridge-Loyalist Road  
Belleville, Ontario K8N 5B9  
Telephone: (613) 969-1913 or  
Admissions: (613) 969-1913 ext. 2204  
Fax: (613) 962-1376

[www.loyalistcollege.com](http://www.loyalistcollege.com)

**Michener Institute**

222 St. Patrick Street  
Toronto, Ontario M5T 1V4  
Telephone: (416) 596-3101 or 1-800-387-9066  
Fax: (416) 596-3122

[www.michener.ca](http://www.michener.ca)

**Mohawk College of applied Arts and Technology**

PO Box 2034  
135 Fennell Ave. W  
Hamilton, Ontario L3C7L3  
Admissions: (905) 575-2000 or 1-866-410-4795

[www.mohawkcollege.ca](http://www.mohawkcollege.ca)

**Niagara College of Applied Arts and Technology**

300 Woodlawn Road  
Welland, Ontario L3C 7L3  
Telephone: (905) 735-2211  
Fax: (905) 736-6000

[www.niagarac.on.ca](http://www.niagarac.on.ca)

**Northern College of Applied Arts and Technology**

PO Box 3211, Hwy 101 East  
Timmins, Ontario P4N 8R6  
Telephone: (705) 235-7222 or 1-866-736-5877  
Fax: (705) 235-7279

[www.northernnc.on.ca](http://www.northernnc.on.ca)

**St. Clair College of Applied Arts and Technology**

2000 Talbot Road West  
Windsor, Ontario N9A 6S4  
Telephone: (519) 966-1656 or 1-800-387-0524  
Fax: (519) 972-3811

[www.stclaircollege.ca](http://www.stclaircollege.ca)

**St. Lawrence College of Applied Arts and Technology**

100 Portsmouth Avenue  
Kingston, Ontario K7L 5A6  
Telephone: (613) 544-5400 ext. 1610 or 1-800-463-0752  
Fax: (613) 545-3923

[www.stlawrencecollege.ca](http://www.stlawrencecollege.ca)

**Sault College of Applied Arts and Technology**

PO Box 60, 443 Northern Avenue  
Sault Ste. Marie, Ontario P6A 5L3  
Telephone: (705) 759-6700  
Admissions: 1-800-461-2260  
Fax: (705) 759-3273

[www.saultcollege.ca](http://www.saultcollege.ca)

**Seneca College of Applied Arts and Technology**

1750 Finch Ave. East  
North York, Ontario M2J 2X5  
Telephone: (416) 491-5050  
Admissions: (416) 491-5050 ext. 22800  
Fax: (416) 493-3958

[www.senecac.on.ca](http://www.senecac.on.ca)

**Sheridan College Institute of Technology and Advanced Learning**

Box 2500  
1430 Trafalgar Road  
Oakville, Ontario L6H 2L1  
Telephone: (905) 845-9430  
Fax: (905) 815-4148

[www.sheridancollege.ca](http://www.sheridancollege.ca)

**Sir Sandford Fleming College of Applied Arts and Technology**

599 Brealey Drive  
Peterborough, Ontario K9J 7B1  
Telephone: (705) 749-5530 or  
1-866-353-6464

[www.flemingcollege.com](http://www.flemingcollege.com)

In addition,  
Collège d'Alfred ([ww.collegedalfred.ca](http://www.collegedalfred.ca)),  
Kemptville College ([www.kemptvillec.uoguelph.ca](http://www.kemptvillec.uoguelph.ca)),  
and Ridgetown College ([www.ridgetownc.on.ca](http://www.ridgetownc.on.ca))  
offer postsecondary programs in agricultural technologies.

**Apprenticeship Websites**

[www.skilledtrades.ca](http://www.skilledtrades.ca) or [www.edu.gov.on.ca](http://www.edu.gov.on.ca)  
Telephone: 1-888-JOBGROW