

FELLOWES HIGH SCHOOL COURSE CALENDAR 2012-2013

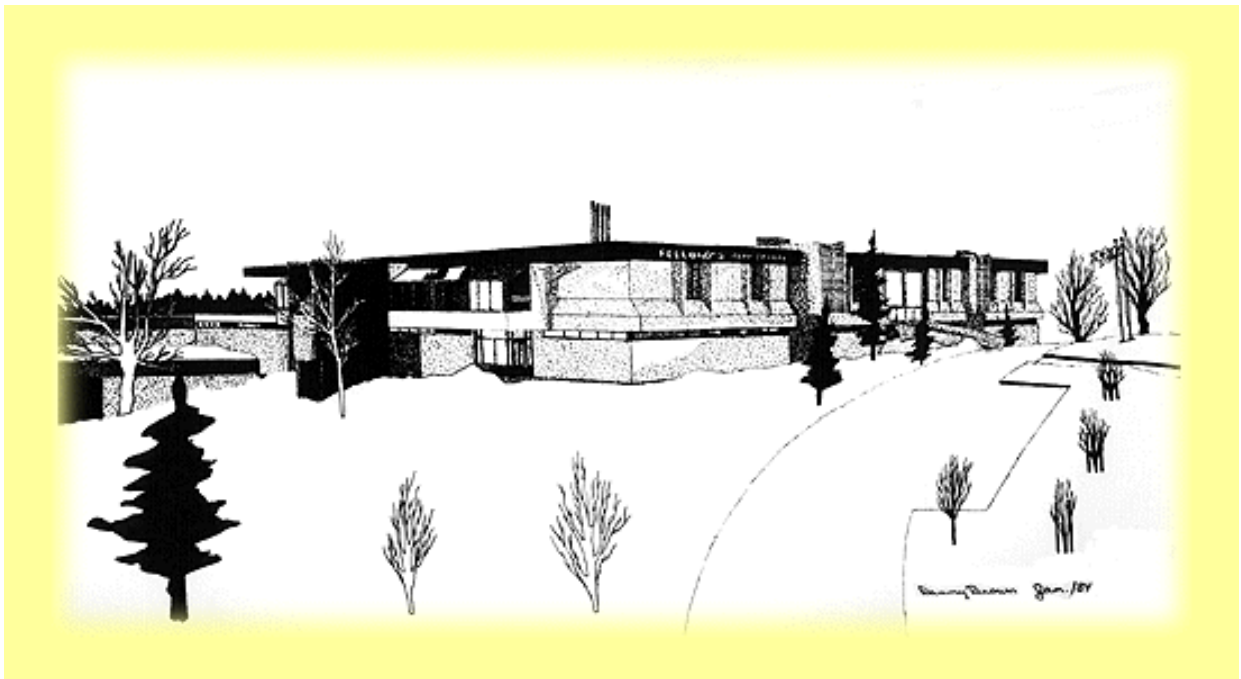


Table of Contents

A.	REACHING EVERY STUDENT.....	3
B.	NOTE TO STUDENTS and PARENT/GUARDIANS.....	3
C.	THE SCHOOL'S OBJECTIVES.....	3
D.	HIGH SCHOOL GRADUATION REQUIREMENTS AND CONSIDERATIONS.....	3
	Definition of a Credit.....	3
	Ontario Secondary School Diploma (OSSD).....	4
	Ontario Secondary School Literacy Test (OSSLT).....	4
	Ontario Secondary School Literacy Course (OSSLC).....	4
	Literacy Adjudication Process, Mandatory Community Involvement.....	5
	Ontario Secondary School Certificate, Certificate of Accomplishment.....	5
	Additional Considerations for Accumulation of Credits.....	5
	Substitutions for Compulsory Courses, Prior Learning Assessment and Recognition (PLAR).....	5
	Music, Transfer Courses, E-Learning, Dual Credits.....	6
E.	STUDENT RECORDS.....	6
	Ontario Student Record, Ontario Student Transcript, Full Disclosure.....	6
	Evaluation and Examination Policies, Semester System.....	7
F.	SPECIAL PROGRAMS.....	7
	Cooperative Education and Other Forms of Experiential Learning.....	7
	Forms of Experiential Learning and Related Programs Chart.....	8 & 9
	Ontario Youth Apprenticeship Program (OYAP).....	9 & 10
	Partnering to Achieve Student Success (PASS).....	10
	Specialist High Skills Majors (SHSM), Student Success.....	10
	English As a Second Language (ESL), Special Education.....	11 & 12
	Fellowes-KI Pembroke Partnership.....	12
G.	EXPECTATIONS OF STUDENTS.....	12
	Attendance Requirements, Students In Good Standing, Code of Behaviour, Buses, Student Lockers, RCDSB Safe School Policy.....	12 & 13
H.	COURSE SELECTION.....	13
	Course Code Explanation, Types of Courses in Grade 9 and 10, Locally Developed Compulsory Courses, Applied courses, Academic courses, Open Courses.....	13 & 14
	Types of courses in Grades 11 and 12, Workplace preparation courses, College preparation courses, College/University preparation Courses, University preparation courses, Open courses, Course Outlines and Curriculum Documents, The process—Your Next Steps.....	14
	Course Code Explanation.....	15
	Educational Planning Guide.....	16
I.	COURSE DESCRIPTIONS.....	
	Possible Fine Arts Pathways.....	17
	Arts (Visual Art, Drama, Music, Photography).....	18 & 19
	Possible Business Studies Pathways.....	20
	Business & Computer Studies.....	21
	Possible English Pathways.....	22
	English.....	23 & 24
	Possible French Language Pathways.....	25
	French (Extended French and Core French).....	26
	Guidance and Career Education (Career Studies, Co-Op, Peer Helping, OYAP).....	27 & 28
	Interdisciplinary Studies in the Curriculum (R.I.S.E. Program).....	28
	Possible Mathematics Pathways.....	29
	Mathematics.....	30 & 31
	Possible Physical Education Pathways.....	32
	Health and Wellness High School Major Pathway.....	33
	Physical Education.....	34 & 35
	Hockey Academy.....	35
	Possible Science Pathways.....	36
	Science.....	37 & 38
	Possible Social Science Pathways.....	39
	Social Sciences (Geography, History, Law, Family Studies,).....	40 & 41
	Possible Technology Pathways.....	42
	Transportation Specialist High Skills Major Pathways.....	43
	Hospitality and Tourism Specialist High Skills Major Pathways.....	44
	Technological Studies.....	45-48

A. REACHING EVERY STUDENT

The Renfrew County District School Board, through its secondary school program, is committed to equip all students with the knowledge, skills and attitudes they need for successful outcomes – smooth transitions to the postsecondary destinations of their choice. Our schools offer educational programs that promote high standards, while providing students with learning opportunities and supports needed for success.

Successful completion of secondary education in Ontario is important and a valuable step toward postsecondary opportunities. Students may create or choose a program pathway that prepares them for direct entry to:

- Apprenticeship Programs
- College
- Community Living
- University
- The Workplace

There is value, honour and dignity in all postsecondary destinations and all sectors of employment. A student's Program Pathway is his or her educational program and reflects the goals that help motivate him or her to complete secondary school. Building a successful pathway through school requires planning and is a cooperative effort involving students, parents/guardians, teachers and guidance counsellors. Factors you must consider in your planning include:

- most recent levels of achievement
- preferred learning style
- strengths
- immediate educational needs

Early success in high school is essential. Statistics in Ontario show very clearly that failure in courses in grade 9 and 10 is a significant factor in students dropping out of school. Appropriate course selection and a proactive plan for success are important.

Schools in Renfrew County have a strong focus on Student Success. In each of our high schools, Classroom teachers, Student Success teachers, Guidance counsellors, Special Education teachers, School Support counsellors, Co-operative Education teachers and Administrators form strong teams who are dedicated to successful outcomes for all students. For our students making the transition from grade 8 to grade 9, there has never been greater attention paid to their strengths and needs, while focusing on opportunities for success. We are proud to have the excellent and exciting transition program "Link Crew" in all of the RCDSB secondary schools.

This Course Calendar is a valuable tool to assist families in planning and reviewing a pathway to success for all students. Contact our Student Services department for more information.

B. NOTE TO STUDENTS and PARENT/GUARDIANS

This booklet describes our school organization and all courses offered starting at the grade 9 level in our school. Before completing the registration form, students, with their parents/guardians, should:

1. Read the High School Graduation Requirements and Considerations section carefully.
2. Read the course descriptions in this course calendar.
3. If currently enrolled in the French Immersion Program, decide between the Core and Extended French options.
4. Discuss the choices at home. Students wishing more info may talk with guidance counsellors, teachers, and/or administration or, if you wish, call Fellowes at 735-6858.

REGISTRATION FOR 2012-2013 WILL BE DONE
ON-LINE

SCHOOL OFFICIALS WILL ADVISE BUT THE
ULTIMATE RESPONSIBILITY FOR COURSE
SELECTION LIES WITH STUDENTS AND THEIR
PARENTS.

C. THE SCHOOL'S OBJECTIVES

Fellowes is committed to helping students acquire the knowledge, skills, values and attitudes which are useful both now and in later life. Fellowes has the following objectives:

1. to provide each student with quality educational opportunities through an excellent selection of programs.
2. to meet the individual needs of each student, whether he/she is planning post secondary education or is going directly to the world of work.
3. to create an environment which encourages learning, enhances positive human relations, provides a disciplined systematic approach to tasks and fosters democratic principles.

D. HIGH SCHOOL GRADUATION REQUIREMENTS AND CONSIDERATIONS

What is a credit? A credit is granted in recognition of the successful completion of a course that has been scheduled for a minimum of 110 hours, and has been developed from a Ministry of Education curriculum guideline or has been approved by the Ministry.

Ontario Secondary School Diploma (OSSD): This diploma is granted, on the recommendation of the Principal of the secondary school last attended, to a student who has accumulated a minimum of thirty credits. This includes 18 compulsory credits and 12 optional credits. Forty hours of community involvement and successful completion of the literacy requirement must also be achieved.

Compulsory Credits (total of 18)

- 4 credits in English (1 credit per grade)
- 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 (music, art, drama, or dance)
- 1 credit in health and physical education
- 1 credit in French as a second language
- 1/2 credit in civics and 1/2 credit in career studies or computer studies

Plus:

- Group 1 : English (including the Ontario Secondary School Literacy Course), French as a second language, classical languages, international languages, Native languages, Canadian and world studies, Native studies, social sciences and humanities, guidance and career education, cooperative education
- Group 2 : French as a second language, the arts, business studies, health and physical education, cooperative education
- Group 3 : French as a second language, science (Grade 11 or 12), computer studies, technological education, cooperative education

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

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

Optional Credits (total of 12): In addition to the 18 compulsory credits, students have to earn 12 optional credits in courses of their choice, selected from the full list of courses available in the school. Optional credits allow students to build an educational program that suits their individual interests and meets university, college, apprenticeship, or work requirements.

Ontario Secondary School Literacy Test (OSSLT): All students must successfully complete the literacy requirement in order to earn a Secondary School Graduation Diploma. For most students this requirement will be met through the administration of the Literacy Test in the spring of Grade 10. The test is based on Ontario curriculum expectations for language and communication, particularly reading and writing, up to and including Grade 9. The test will identify areas for remediation for students who are unsuccessful in completing the test. Students who write the test but do not succeed may retake the test and successfully complete both the reading and writing components in order to pass. There is no limit to the number of times the test may be taken.

Accommodations: Students who are receiving Special Education programs and services that have an Individual Education Plan (IEP) may receive the accommodations that are set out in the students' IEP.

Deferrals: Deferral of the test may occur for students who might benefit. This would include students who have been identified as exceptional and students registered in English as a second language/English Literacy Development courses who have not yet acquired the level of proficiency in English required for successfully completing the test. The Principal determines if a deferral should be granted and time period for the deferral.

Exemptions: Students whose IEP indicates that the student is not working towards the attainment of a Secondary School Graduation Diploma may, with parental consent and approval of the Principal, be exempted from participating in the Literacy Test.

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

To be eligible to take the course, students must have attempted the OSSLT at least once and been unsuccessful in that attempt. This course can also be used to count as the Grade 11 or Grade 12 English compulsory course.

Literacy Adjudication Process: At the end of the school year, a school board adjudication panel may provide certain students with an additional opportunity to meet the literacy graduation requirement. These students include those who would otherwise be eligible to graduate but, through no fault of their own, have not been able to take advantage of the normal opportunities to write the OSSLT and/or have not been able to enrol in or complete the OSSLC, owing to unforeseen circumstances. Also eligible for the adjudication process are students who were receiving special education programs or services, and who had an IEP documenting required accommodations, but, owing to unforeseen circumstances, did not have access to these accommodations when they were taking the OSSLT.

Mandatory Community Involvement: Every student who begins secondary school in Ontario is required to complete 40 hours of community involvement in order to receive a diploma. The purpose of this requirement is to encourage students to develop an understanding of the various roles they can play in their community and to help them develop a greater sense of belonging within the community. The school provides a document that outlines information on the community involvement diploma requirements for students and parents, as well as for the persons and organizations who are asked by students to sponsor a particular community involvement activity. Students in Grade 8 may now begin accumulating hours in the summer before they enter Grade 9.

- **Roles and Responsibilities of Students:** In consultation with their parents, students will select an activity or activities from the board's list of approved activities, or choose an activity that is not on the list, provided that it is not an activity specified on the ministry's and the board's lists of ineligible activities. If the activity is not on the board's list of approved activities, the student must obtain approval from the principal before beginning the activity. The safety of the student is paramount. It should be noted that students will not be paid for performing any community involvement activity. Community involvement requirements must be met outside of regularly scheduled class time. A "Completion of Community Involvement Activities" form must be completed by the student, the student's parent, and the community sponsor (that is, the person or organization that provided the community involvement opportunity for the student). The student must submit the form to the principal or other school contact upon completion of the 40 hours or upon completion of a specific activity.
- **Roles and Responsibilities of Parents:** Parents should provide assistance to their child in the selection of their community involvement activities. Parents are also encouraged to communicate with the community sponsor and the school principal if they have any questions or concerns. A parent must sign the "Completion of Community Involvement Activities" form if the student is under the age of eighteen years.

Ontario Secondary School Certificate (OSSC): This certificate will be granted, on request, to a student who leaves school before earning the OSSD and who has earned a minimum of 14 credits including seven compulsory credits and seven elective credits. The compulsory credits include: 2 credits in English, 1 credit in Mathematics, 1 credit in Science, 1 credit in Canadian Geography or History, 1 credit in Physical Education and 1 credit in Art or Technology.

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

Additional Considerations for Accumulation of Credits (Complete information on all of these opportunities is available in Student Services):

Substitutions for compulsory courses: Up to three substitutions can be made for compulsory courses during a student's high school career. The decision to make a substitution for a compulsory course is done if the student's educational interest is best served. The principal makes the decision in consultation with the parents/guardians and appropriate staff.

Prior Learning Assessment and Recognition (PLAR): Students may obtain credits for knowledge and skills they have acquired outside of school. This prior learning is assessed and evaluated to determine whether the student has met the provincial course expectations. Students may "challenge" a specific course for credit if they can provide evidence indicating a likelihood of success. Since Grade 9 is viewed as a foundation year for all Ontario students, the PLAR process does not apply to Grade 9 credits. A student who believes that she or he possesses the full range of knowledge and skills for a Grade 10 to 12 course in the school course calendar should refer to the Student Services Department for information about completing the application. The student should be prepared to provide reasonable substantive evidence for success in the challenge process (e.g. a portfolio, documentation of related course work, recommendation from a teacher, etc.). Further, the student will be required to demonstrate achievement of the course expectations through formal tests, including exams, and other assessment strategies appropriate for the particular course. Students who are successful in the challenge assessment will receive a final percentage grade and a credit for the course.

Additional Considerations for Accumulation of Credits (continued)

Music: A maximum of two credits may be earned by students who present evidence of satisfactory standing in recognized programs offered by conservatories or colleges of music.

Transfer courses: Transfer courses enable students who alter their post secondary plans to transfer from one type of course to another in 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.

e-Learning Ontario: Online learning is quickly becoming an important part of education in all pathways, including college, university and in the workplace, eLearning courses may allow for more flexibility in a student's timetable and may allow students to access courses that will complement their timetables but that are not available in their school. These courses provide students with the opportunity to build independent learning skills, which will help them be successful in any post-secondary pathway.

eLearning options are available to all students registered with the Renfrew County District School Board. You may be an ideal candidate for eLearning if you have high achievement in the Learning Skills (Responsibility, Organization, Independent Work, Collaboration, Initiative and Self-Regulation). eLearning requires the same time commitment as a traditional day-school class. However, the method of delivery allows for flexibility in the schedule, and students may choose to complete the course work outside of the traditional school day or traditional school environment. It is not required that the students and teacher are working on the course at the same time. However, the course will follow the same semester start and end dates as a traditional face-to-face class, and there will be timelines for completing tasks, assignments and other assessments within the course.

The RCDSB currently offers a variety of online courses taught by qualified teachers who provide innovative, relevant and engaging eLearning experiences. All eLearning courses meet the same curriculum requirements of face-to-face classes, as set out by the Ontario Ministry of Education. In addition, the RCDSB is a member of the Ontario eLearning Consortium, which may allow students to access specialized courses from other school boards who also offer courses through the Consortium.

The following courses will be offered by the RCDSB for the 2012-2013 school year, subject to sufficient enrolment. Students wishing to enrol in any of the following courses through eLearning should indicate their choice on their course selection sheet.

BAT4M (Financial Accounting Principles)
 BMI3C (Marketing: Goods, Services, Events)
 CGF3MF (Physical Geography: Patterns, Processes and Interactions —offered in French only)
 CGR4E/M (The Environment and Resource Management)
 ETS4U (Studies in Literature)
 HHS4M (Individuals and Families in a Diverse Society)
 HNC3O (Fashion and Creative Expression)
 HRT3M (World Religions: Beliefs, Issues and Religious Traditions)
 ICS3U (Introduction to Computer Science)
 ICS4U (Computer Science)
 MCT4C (Mathematics for College Technology)
 PPZ3O (Health for Life)
 SNC4M (Science)
 TGJ3M (Communications Technology)

Note: Many other e-Learning courses are offered through school boards belonging to the Ontario eLearning Consortium. For a complete list of courses, please visit the Consortium's website at <http://www.elearningstudents.ca>.

Dual Credits: Dual credit programs are ministry-approved programs that allow students who are still in secondary school to take college or apprenticeship courses that count towards both an Ontario Secondary School Diploma and a postsecondary certificate, diploma, or degree, or an apprenticeship certification. Students may earn up to 4 optional credits for college-delivered dual credit courses. Students may not use college-delivered dual credits to meet compulsory credit requirements or to satisfy the related course requirement for a cooperative education program. In Renfrew County, we have a partnership with Algonquin College for the Dual Credit Program. Because of the requirement to attend the college one afternoon per week these courses will be most suitable for students who are registered in Co-op or for part-time senior students. Please see Student Services for more information.

Correspondence courses, other on-line courses, summer school, alternative adolescent high schools (PAL), specialized programs offered in other Renfrew County secondary schools: Make an appointment with Student Services to discuss any of these options.

E. STUDENT RECORDS

Ontario Student Record: The Ontario Student Record (OSR) is the official school record for a student. Every Ontario school keeps an OSR for each student enrolled at that school. The OSR contains achievement results, credits earned, diploma requirements completed and other information important to the education of the student. Students and their parents (if the student is not an adult) may examine the contents of the OSR. The Education Act and Freedom of Information Legislation protect these records. The Ontario Ministry of Education, under the authority of the Education Act of the province of Ontario, requires that each school maintain a record of basic information for each student registered in the school. The information will be used for the purposes of the proper education and well-being of the student and for necessary statistical purposes. Personal information on this form is collected under the authority of the Education Act, R.S.O. 1990 c.E.2, as amended, and will be used for the OSR and for administrative purposes. Questions about collection may be directed to the school principal.

Ontario Student Transcript: At the conclusion of each year a summary of courses attempted and credits gained will be maintained in each student's Ontario Student Transcript. Courses will be entered under the common course code and the percentage obtained will be reported. This very important document is available for students and their parents or guardians to see on request. When a student receives his/her diploma or decides to terminate his/her formal schooling, an Ontario Student Transcript will be issued on request.

Full Disclosure: Full disclosure applies to all Grade 11 and 12 courses. Full disclosure means that if a student withdraws from, repeats or fails a Grade 11 or 12 course it must be recorded on the OST. Repeated Grade 11 and 12 courses will both show on the transcript with their recorded mark, however only one credit will be granted and the lower mark will have an "R" in the credit column. Failed Grade 11 and 12 courses will show on the OST. Withdrawals from Grade 11 and 12 courses will show on the OST, if they are dropped 5 instructional days after the first report card of the semester or later. They do not show if they are dropped before the 5 instructional days following the first report card.

Evaluation and Examination Policies: Students will be evaluated based on the achievement charts in the Provincial Curriculum Policy Documents for the courses in which they are enrolled. Evaluation is based on the level of achievement the student demonstrates in the skills and knowledge covered in a course. Seventy percent (70%) of the evaluation is based on classroom work and may be determined through a variety of methods, such as ongoing class demonstrations, presentations, essays, performances and classroom tests and quizzes.

Evaluation and Examination Policies: (cont'd) Teachers will use "Assessment for Learning" and "Assessment as Learning" practices to help students identify what the learning goals are, where they are in relation to the learning goals and what next steps they need to take to achieve the goals. This ongoing feedback will help prepare students for the purpose of summarizing learning at a given point in time, to make judgments about the quality of student learning on the basis of established criteria, and to assign a value to represent that quality. Thirty percent (30%) of the evaluation is based on a final summative evaluation that may be determined through one or a variety of methods in the latter portion of the course. These could include a portfolio, essay, examination and/or demonstration. This final evaluation reflects the range and level of student skills and knowledge towards the conclusion of the course and will give students an opportunity to synthesize the different aspects of their learning for each particular course

Semester System: The school year is divided into two equal parts: SEMESTER 1 runs from September to the end of January; SEMESTER 2 runs from February to the end of June. In each semester the student has the opportunity to take 4 courses and obtain 4 credits for a total of 8 credits per year. Final examinations occur at the end of each semester. Parents should receive a formal report on the progress of their student 4 times per year, once at the mid-point of each semester and once at the end of each semester. Parents, of course, are invited to contact the school at any time to get an up-date on the progress of their child.

F. SPECIAL PROGRAMS

Cooperative Education and Other Forms of Experiential Learning: Planned learning experiences that take place in the community include job shadowing, job twinning, work experience and virtual work experience, and cooperative education. This provides the students who are enrolled in courses of all types and in all disciplines with the opportunity to enhance their school programs. Experiential learning can assist all students, including exceptional students, who are bound for university, college, apprenticeship, or the workplace, in making career decisions as well as in developing the knowledge, skills, and attitudes that are essential in today's society.

R.I.S.E. Riding Into Successful Experiences: This program is a unique experiential learning opportunity. Students take 1 or 2 compulsory credits by correspondence for 2 mornings per week. The remaining 3 days are spent earning Co-op credits at a barn in Beachburg. Here the students assist with chores, feeding and regular horse farm maintenance. In the afternoons, the owner provides riding lessons. There is potential to earn 3 co-operative education credits and 2 compulsory credits for a total of 5 credits in a semester.

Forms of Experiential Learning and Related Programs

Length	Credit Value	Description	Key Elements
Job shadowing (e.g., Take Our Kids to Work)			
½ to 1 day (in some cases, up to 3 days)	None	one-on-one observation of a worker at a place of employment	involves the pairing of a student with a worker in a specific occupation may be integrated with a credit course may be part of a student's school-work transition program
Job twinning			
½ to 1 day	None	one-on-one observation of a cooperative education student at his or her placement	involves the pairing of a student with a cooperative education student may be integrated with a credit course may be part of a student's school-work transition program
Work experience			
1-4 weeks	None	a planned learning opportunity, within any credit course, that provides students with relatively short-term work experiences, usually of one or two weeks' duration and not exceeding four weeks	involves a short-term, subject-related work placement forms an integral part of a specific credit course requires pre-placement orientation requires a learning plan
Virtual work experience			
the equivalent of 1-4 weeks	none	a simulated work experience, within any credit course, that allows students, including students who receive a special education program or services and students in rural areas, to take advantage of a greater variety of experiences than those available in the local economy	involves a short-term, subject-related virtual work placement facilitated through the use of computer software and the Internet forms an integral part of a specific credit course requires pre-placement orientation requires a learning plan

Forms of Experiential Learning and Related Programs (continued)

Length	Credit Value	Description	Key Elements
Cooperative education			
full term (year or semester)	1 credit per 110-hour cooperative education credit course successfully completed	a planned learning experience, for which credits are earned, that integrates classroom theory and learning experiences at a workplace to enable students to apply and refine the knowledge and skills acquired in a related curriculum course or a locally developed course	requires a written application process requires a personalized placement learning plan involves the earning of credits requires pre-placement orientation is monitored by the cooperative education teacher integrates classroom and workplace learning involves reflective learning involves student assessment
School-work transition programs			
varies, but typically not less than 2 years (3-4 semesters over Grades 11 and 12)	varies with type of planned workplace experience	a combination of school- and work-based education and training involving a variety of learning opportunities	is oriented towards students who will be entering the workforce directly after high school involves the development of partnerships with employers involves the enhancement of curriculum with input from employers involves the earning of cooperative education credits

Ontario Youth Apprenticeship Program (OYAP):
 What is OYAP? OYAP is an enhanced co-op program, which allows students to start to learn a skilled trade (through apprenticeship) while at the same time completing the requirements (through co-op credits) for Ontario Secondary School graduation.

What is Apprenticeship? An apprenticeship is an agreement between a student who wants to learn a skilled trade, an employer / sponsor who provides the training and the Ministry of Training Colleges and Universities Apprenticeship branch.

Who Is Eligible?

- Students must be enrolled full-time during the program
- Students must be 16 years of age and must have earned 16 credits to participate in OYAP.
- Students must be recommended by appropriate departments (e.g. Technological studies, Student Services, Co-op).

- Students must have a strong desire to pursue a career in a skilled occupation.
- Students must complete all of the compulsory courses required for the OSSD.

Program of Study:

- Year 1 and 2: Regular academic program with appropriate electives*.
- Year 3: Regular academic program with appropriate electives* plus enhanced co-op (pre-apprenticeship or apprenticeship on the job training)
- Year 4: Regular academic program with appropriate electives* plus enhanced co-op (pre-apprenticeship or apprenticeship on the job training).

Program of Study (continued)

* Appropriate electives linked to on the job training (co-op).

See "Apprenticeship Subject Pathways" (Ministry of Education, Ministry of Training, Colleges and Universities: 2003)

See your Technological Studies, Student Services or Co-op teacher for details (brochures available in Student Services). In September 2010 there will be a unique opportunity for students apprenticing as Automotive Service technicians. An 8-week course will be offered at Algonquin College in Pembroke delivering a "triple play": students finish off their necessary high school credits, earn two college credits, and complete their Level 1 apprenticeship hours and certification. In addition, daily driving expenses from other communities to Pembroke will be covered.

PASS - Partnering To Achieve Student Success: PASS is a school/college/ industry partnership that provides direction for students exploring career possibilities in the areas of Business Studies, Outdoor Education, Hospitality and Tourism, and Electronics/ Communication Technology. In the Eastern Ontario region, Algonquin College, Loyalist College, St. Lawrence College and nine local school boards have partnered and are working with local industry to offer students a logical pathway into the colleges' programs. The PASS program is open to any grade 11 or 12 student enrolled in a school where the "pathway" courses are offered. Check out the PASS website: www.passpathways.on.ca for more resources, opportunities and suggestions regarding consideration of college as a destination.

Specialist High Skills Majors (SHSM): These are opportunities now available in all RCDSB schools for students with a confirmed interest in a particular sector to "major" in that sector while they are still in high school and to receive an enhanced diploma and transcript as a result. All four destinations (Apprenticeship, College, University and Workplace) are available within each SHSM. The sectors/majors offered at FHS are Hospitality and Tourism, Transportation, and Health and Wellness (Phys.Ed. OR Cosmetology). Students registered in one of our SHSM programs will participate in:

- Eight bundled grade 11 and 12 credits, including four credits in the major area of study *
- Sector-recognized Certifications & Safety Awareness Training- for example CPR, First Aid, WHMIS, Health and Safety, CAD/CAM, Service Excellence etc.,
- Experiential Learning - job shadowing, work experience, sector trade shows, job twinning, and tours,
- Use of the Ontario Skills Passport – essential skills and work habits as identified by the HRSDC (Human Resources and Social Development Canada) – for documentation,

Specialist High Skills Majors (SHSM): (continued)

- Reach-ahead experiences at the student's likely destination: Apprenticeship, College, University or the Workplace,
- A minimum of two Cooperative Education credits linked to the major credits are also required to complete their cooperative education credits in Grade 11, in order to allow room in their timetables in Grade 12 for credits needed to meet university entrance requirements.)

Health and Wellness majors must select two courses from: Senior Physical Education or Hair & Aesthetics

Hospitality majors must select two courses from: Senior Hospitality

Transportation majors must select two courses from: Senior Transportation

For more information or an application from, contact our Student Services Department.

Student Success: The goal of Student Success is to reach every student in need and provide an opportunity to assure success. The Student Success Team includes the Principal, the Student Success Teacher, Special Education, Guidance, Co-op and the School Support Counsellor. Together they:

- identify and instruct struggling students in their courses,
- direct student advocacy,
- provide more options for learning and work completion,
- monitor student progress,
- facilitate transition from elementary to secondary and secondary to work/post secondary education.
- provide credit rescue, an intervention for students that are struggling in a specific credit course. It can provide a variety of supports to assist with classroom instruction, organization and assessment for struggling students.
- may recommend credit recovery, an intervention to recover a credit after an unsuccessful initial attempt. Credit Recovery is just one of several options for any student who fails, but the final determination of Credit Recovery Placement is made by the school's Credit Recovery Team

The Student Success Team works with school staff, students, parents, and the community to ensure more students earn the credits necessary to graduate.

English As A Second Language (ESL): ESL programs receive funding based on the number of students who fit the provincial criteria. The board receives funding for students who have been in Canada for three years or less, and who have come to Canada from a country in which English is not the first language. These criteria exclude students who either enter Canada from an English speaking country but cannot speak English, or who take longer than three years to acquire the language. Students are usually enrolled in a full program of mainstream courses and may receive tutorial support from an ESL instructor or peer tutor.

The principal will determine whether or not a student requires extra assistance based on data gathered when a new student registers, or on a recommendation received from the classroom teachers. The principal will complete a Request for ESL support and forward it to the Superintendent for approval. The principal of Continuing Education will assist the principal of the school in obtaining a suitable instructor. The principal and classroom teacher will evaluate the need for continuing ESL support at least twice per year and forward the recommendations to the Superintendent.

Special Education

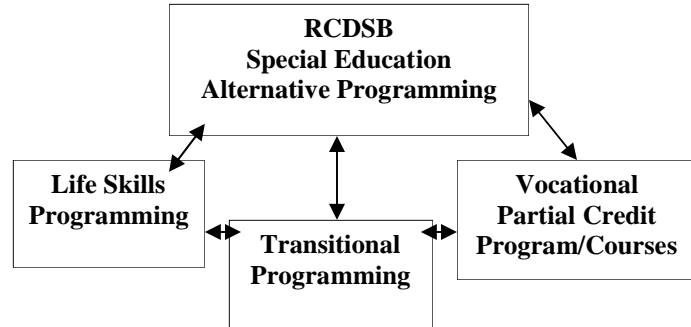
The Role of the Special Education Department: The Special Education Department offers academic support plus a variety of learning experiences for students who have been identified as exceptional. The teacher(s) in this Department provide resource help, liaison with subject teachers, and counselling services to ensure that these students have the opportunity to reach their potential. Recommended interventions, accommodations and/or modifications for every identified student will be communicated to all interested parties through the Individual Education Plan (IEP).

Referrals and Identification: Students who may have special needs are referred to the Special Education Department. These referrals may be made by feeder school principals, parents, teachers, or the student themselves. Formal and informal assessments are carried out to determine student need for special programs. Parental input and approval are both encouraged and essential at all points in the Identification, Placement and Review Committee (IPRC) process to ensure that the best interests of the student are being met.

Special Education Advisory Committee (S.E.A.C.): The Special Education Advisory Committee is responsible to the District School Board for examining, reviewing and making recommendations regarding the provision of Special Education Programs and Services. S.E.A.C. consists of representatives of up to 12 community associations, three trustees and the superintendent responsible for Special Education. Members of the community are welcome to attend and observe meetings. Call 735-0151 to confirm meeting dates and times.

Board Special Education Parent Guide: Copies of the booklet Understanding the I.P.R.C. Process: A Parent's Guide and informational brochures (SEAC, IPRC, IEP, Transition Planning, Special Education Resource Teacher, Development Disability, Deaf/Hard of Hearing, Blind/Low Vision, Mild Intellectual Disability, Behaviour, Gifted) are available through the school's Special Education Department as well as on-line on the board website (www.renfrew.edu.on.ca).

RCDSB Secondary Alternative Special Education Programs:



RCDSB has a 3-tiered alternative program design. The tiered approach is an effective approach to assessment and intervention which allows for varied levels of supports for a student requiring special education programs and services. Placement into programs is done through an Identification Placement and Review (IPRC) meeting. An Individual Education Plan (IEP) is designed for each student according to their individual learning needs and strengths. Programming is based on the learning expectations outlined in the IEP, which is developed and coordinated by the special education teacher in consultation with parent(s)/guardian(s) and other subject area teachers. This plan is revised and updated based on the results of ongoing assessment and evaluation. An alternate report card is used to summarize students achievement within the alternate program. All alternative levels are instructed by staff with Special Education qualifications

Alternative Program Descriptions

There are three levels of alternate programming that offers students different levels of support. Vocational Partial Credit Program, Transition Program and the Life Skills Program. The Vocational Program is to develop academic skills near or at grade level in a highly structured small class placement. Intensive instructional support is provided for Literacy and Mathematics with potential for modified and regular credit acquisition. Student programming is expected to include independent integration into credit class placements which are recorded on the provincial report card. Locally Developed, Applied level, Open level, Workplace level, and co-operative education courses are among the range of program options. The completion of the Ontario Secondary School Certificate and/or the Ontario Secondary School Diploma defines the range of possible program graduation goals.

Alternative Program Descriptions (continued)

The Transition Program focus is to develop academic skills centering on functional literacy and numeracy skills as well as appropriate life, social and independent living skills in a highly structured learning environment and a small class placement. Integration into Vocational and Life Skills programs may be incorporated into student's timetable considering student and individual site program response need. Independent living, transitional supports to post secondary vocation / community services and the provincial Certificate of Accomplishment define the range of possible graduation goals.

The Life Skills Program focus is to support physical and health needs, develop communication, living skills, life skills, and social and leisure skills within a highly supportive and structured environment. Individualized programs may also include physiotherapy, augmentative communication and comprehensive physical care supports. The program includes working with community agencies in transition planning for students and may include work experience opportunities. Students typically have connections with Community Care Access (CCAC) and Ontario Disabilities Support Program (ODSP). Student progress, in relation to IEP expectations, is formally reported on the alternative report card. Programs consider that students will integrate into classrooms on an auditing basis and/or school activities to the greatest extent possible. The Life Skills program is available to students until June of the calendar year they turn twenty-one. Program objectives are increased independence, transitional support to community services and a Certificate of accomplishment

Fellowes-KI Pembroke Partnership:

Since 1994 Fellowes has operated a fully functioning classroom at KI Pembroke. It is a continuous intake program for students currently enrolled at Fellowes that features:

- Classroom instruction and help
- Co-operative education placements within the KI building
- Possible workplace and apprenticeship opportunities
- Small class size in an adult environment

The program has won many awards for excellence and has had over 50 graduates. To be eligible for admission, students must be at least 16 years of age, have already earned at least 16 credits and must be approved by a selection committee. For more information, call Student Services.

G. EXPECTATIONS OF STUDENTS

1.

Attendance Requirements -

Regular attendance on the part of students is vital to the process of learning, since there is a high correlation between class attendance and achievement. Students who are frequently absent will suffer a loss of content, of experiences, and of related understandings that will affect their achievement and participation. At Fellowes High School, regular participation is expected and students who habitually miss lessons will suffer in the evaluation process because their participation and achievement cannot be fully assessed. Students of compulsory age who do not attend regularly are dealt with under the provision of the Education Act.

2.

Students in Good Standing -

Students at Fellowes High School are urged to become active in the wide variety of sports, drama and other positive opportunities that are available at Fellowes. Such participation is a major component of a balanced education. The following are guidelines which are used by Fellowes in assisting students to maintain a balance between academic requirements and the commitment they must make to effectively participate in school activities.

- All students who are in good standing may participate in school sponsored activities provided they have paid student fees. A 'Student in Good Standing' is one who is working to potential, is up-to-date with regard to assignments and homework, has not acted in such a manner as to warrant a major penalty, such as suspension, and whose attendance is regular.

G. EXPECTATIONS OF STUDENTS (continued)

2. Students in Good Standing (continued)

- When a student has been identified as participating in activities to such a degree that his/her school progress is threatened, the student will be interviewed by the Vice-principal. Students will be withdrawn from out-of-class activities until they have once again earned a 'Good Standing'.
- When students are absent from class for scheduled school activities, it is the student's responsibility to:
 - 1) Inform his/her teachers well in advance of the activity and about the absence.
 - 2) Obtain from the teacher, and complete, all work missed.

3.

Code of Behaviour –

Each Secondary School in Ontario is expected to have a Code of Student Behaviour in which the school's expectations concerning student deportment are clearly enunciated. The School's Code of Behaviour has been developed and approved by the Board and is outlined in the information given to students at the start of the school year.

4.

Buses -

The Renfrew County District School Board provides transportation for many of our students. It is the responsibility of bussed students to be at their bus stop on time and to obey the driver promptly and courteously. With due regard for the student's safety, drivers have the right to put a student off the bus for behaviour which is distracting and dangerous. Drivers have a set of company rules, School Board policies, and Ministry of Transport regulations which they are obliged to enforce. Problems with regard to routes and schedules may be dealt with by telephoning the Transportation Manager (732-8419)

5.

Student Lockers -

A locker is loaned to each student to store their books and clothing. Each student is responsible for purchasing a school lock and keeping the locker locked. The locker may be opened at any time by a designated staff member for the purpose of inspection. The school makes every effort to safeguard lockers but students are cautioned against storing valuables in their lockers. In addition, coats and backpacks must be stored during regular class time.

6.

RCDSB's Safe Schools Policy—may be accessed through the Board's website Policies tab.

H. COURSE SELECTION

Course Code Explanation: All courses are identified by a 6-character code common to all secondary schools in Ontario.

Eg: MCR 3U1 ENG 1P1 CHC 2D1 PPL 4OF

The first three characters identify the Department and the Course

MCR	Mathematics	CHC	Canadian History
ENG	English	PPL	Physical Education

The fourth character identifies the year or grade

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

The fifth character identifies the level of instruction for the course

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

The sixth character is designated by the school for internal purposes.

Types of Courses in Grades 9 and 10: The four types of courses in Grades 9 and 10 are defined as follows:

Locally Developed Compulsory Courses focus on the knowledge and skills that students need to be well prepared for success in grades 11 and 12 Workplace Preparation Courses. Opportunities to develop, enhance, and practice literacy, and mathematical literacy processes, concepts, skills and strategies are the focus of the expectations in these courses.

Applied courses focus on the essential concepts of a subject, and develop students' knowledge and skills through practical applications and concrete examples. Familiar situations are used to illustrate ideas, and students are given more opportunities to experience hands-on applications of the concepts and theories they study.

Academic courses develop students' knowledge and skills through the study of theory and abstract problems. These courses focus on the essential concepts of a subject and explore related concepts as well. They incorporate practical applications as appropriate.

H. COURSE SELECTION (Continued)

Types of Courses in Grades 9 and 10 (continued)

Open courses are the only type of course offered in most subjects other than those listed above. They are designed to prepare students for further study in a subject, and to enrich their education generally. Open courses comprise a set of expectations that are appropriate for all students. Students in Grades 9 and 10 will make the choice between academic and applied courses primarily on the basis of their strengths, interests, and needs. The selection of courses for exceptional students should also be guided by information in the student's Individual Education Plan. Students who are successful in any academic or applied course in Grade 9 will be able to proceed to either the academic or the applied course in the same subject in Grade 10. Grade 10 academic and applied courses will prepare students for particular Grade 11 courses, for which prerequisites are specified in the curriculum policy documents for Grades 11 and 12.

Types of Courses in Grades 11 and 12: Students in grades 11 and 12 will choose from among four destination-related course types: university preparation, university/college preparation, college preparation, and workplace preparation. Open courses are also offered in Grades 11 and 12. Students will make their choices on the basis of their interests, achievement, and career goals. The following is a brief description of the types of courses that are available in the various disciplines of the Ontario curriculum in Grades 11 and 12.

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.

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

College/University 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.

University preparation courses are designed to equip students with the knowledge and skills they need to meet the entrance requirements for university 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 requirements of universities, colleges, or the workplace in mind.

Note: It is very important that students choose courses for the appropriate destination in order to ensure their interest and their success. College/University (M) and University (U) courses, for example, have a high level of difficulty and mostly theoretical content. Workplace (E) and College (C) courses will be more reasonably paced and will include practical real-life examples and applications.

Course Outlines and Curriculum Documents: The courses offered by this school have been developed according to the requirements of the Ontario Ministry of Education. Course outlines are available in the main office for viewing by parents or guardians. Curriculum documents detailing each course are available from the Ministry of Education website www.edu.gov.on.ca. Courses are offered pending sufficient student enrolment. Choose your courses carefully.

The Process – Your Next Steps:

1. Read all of the sections of this book that may apply to you. Invite your parent(s)/guardian(s) to read it also.
2. List the compulsory courses you need to complete for next year.
3. Think about your career goals, your interests and your abilities. Speak with a guidance counsellor, trusted teacher or school administration to ensure that you are on the right track.
4. Read the course descriptions and circle a few that interest you. Share them with your parent(s)/guardian(s).
5. Reduce your selections to the number of electives you require, plus two alternates.
6. Complete the on-line selection process, print out your selections and return the printed copy to your school with a parent signature.

Remember that many very important decisions about courses and teachers for next year will be based on your selections so choose carefully the first time in order to contribute good information to those decisions.

COURSE SELECTION

Course Code Explanation

All courses are identified by a six character code common to all secondary schools in Ontario.

MCR 3U1

The first three characters identify _____
Department and the course

- MCR Mathematics
- SBI Science, Biology

The fourth character identifies the grade level of instruction for the course _____

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

The fifth character identifies the level of difficulty of instruction for the course _____

- O Open—suitable for all levels (e.g. art, music, physical education)
- L Locally-Developed—locally-developed courses for students requiring extra academic support
- P Applied—focus on practical applications
- D Academic—emphasis is on theory and abstract problems
- U University Preparation—developed in association with universities
- E Workplace Preparation—developed in association with workplace
- C College Preparation—developed in association with colleges
- M University/College Preparation—developed in collaboration with both colleges and Universities

The sixth character is designated by the school for internal purposes _____

- 1 the first course
- 2,3,etc. an extra course in the subject; e.g. Manufacturing
- 4 Cooperative Education, 4 credits (2 each semester)
- 7 Cooperative Education, 1 credit
- 8 Cooperative Education, 2 credits
- 9 Cooperative Education, 4 credits (all day)
- B Boys
- G Girls
- E e-Learning
- F Extended French
- S Vocational Partial-Credit Program (.5 credit)
- T Vocational Partial-Credit Program (.5 credit)

Educational Planning Guide

	Grade 9	Grade 10	Grade 11	Grade 12
1	English	English	English	English
2	Mathematics	Mathematics	Mathematics	Elective
3	Geography	Science	Compulsory	Elective
4	French	History	Compulsory	Elective
5	Science	Civics .5 Career Studies .5	Elective	Elective
6	Physical Education	Elective	Elective	Elective
7	BBI201 or TIJ101	Elective	Elective	Elective
8	AMU101 or NAC101	Elective	Elective	Elective

*Electives may count as "compulsory" (Group 1, 2 or 3) – see Diploma Requirements for details.

Use the following table to plan your program of studies. Start with your career goal.

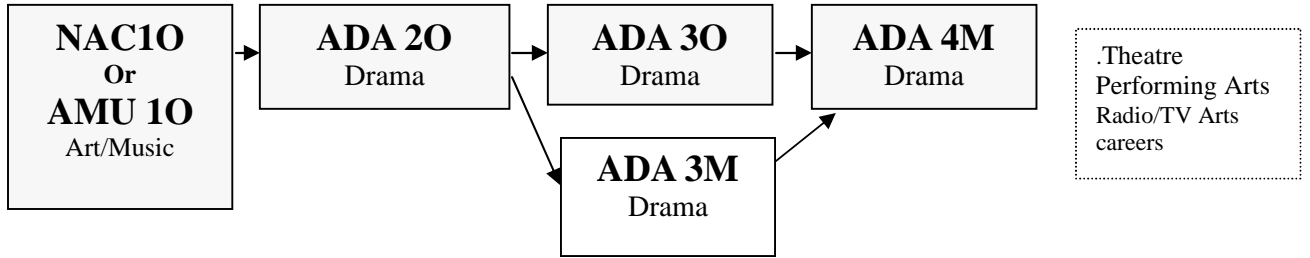
CAREER GOAL: _____

	Grade 9	Grade 10	Grade 11	Grade 12	5 th Year
1					
2					
3					
4					
5					
6					
7					
8					

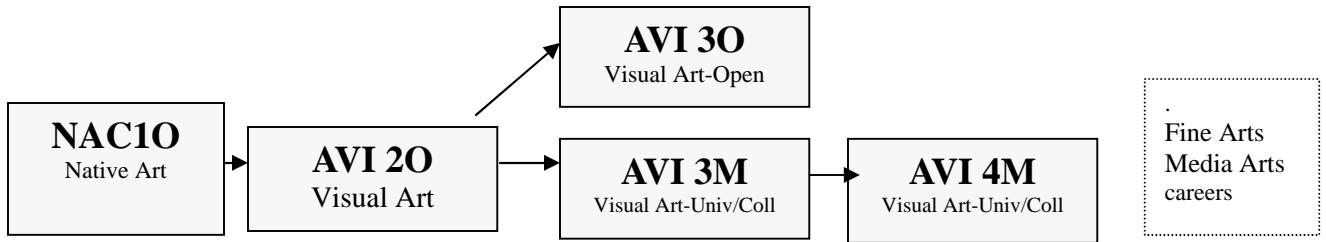
Use pencil for courses you are taking. Use ink for successfully completed courses. To keep open as many options as possible, students are encouraged to continue Mathematics until the end of Grade 12.

Possible Fine Arts Pathways

College or University bound student with an interest in Drama



College or University bound student with an interest in Visual Art



College or University bound student with an interest in Music



ARTS

FINE ARTS CERTIFICATE AT FHS

AMU 101	AMU101	AMU3M1	AMU4M1
NAC101	AVI201	AVI301 Or AVI3M1	AVI4E1 Or AVI4M1
	ADA201	ADA301 Or ADA3M1	ADA4M1
		AWQ3O1	AWQ4M1

To qualify for a Fine Arts Certificate

- GOLD: Students must complete 7 arts courses and achieve a mark of 70% in each elective.
- SILVER: Students must complete 6 arts courses and achieve a mark of 70% in each elective.
- BRONZE: Students must complete 5 arts courses and achieve a mark of 70% in each elective.

Students may also specify a concentration for the Fine Arts Certificate in music or visual arts with completion of 4 core courses in each discipline.

F. COURSE DESCRIPTIONS

ARTS

NAC10 Expressing Aboriginal Cultures Open
This course examines Aboriginal cultures in Canada through an exploration of art forms: painting, sculpture, storytelling, dance, and music created by Aboriginal artists. Students will learn to identify Aboriginal art forms and describe relationships between the art forms and Aboriginal traditions, philosophy, and culture. Students will also create their own art forms to express their understanding of Aboriginal identity, relationships, and sovereignty. This course will also introduce students to the elements and principles of design, and the creative and critical analysis processes, offering an overview of visual arts as a foundation for further study.

Visual Arts

AVI20 Visual Arts Open
Qualifies as a Compulsory Group 2 Course
This course enables students to develop their skills in producing and presenting art by introducing them to new ideas, materials, and processes for artistic exploration and experimentation. Students will apply the elements and principles of design when exploring the creative process. Students will use the critical analysis process to reflect on and interpret art within a personal, contemporary, and historical context. Studio fee will apply.

AVI30 Visual Arts Open
This course focuses on studio activities in the visual arts, such as drawing, painting, sculpture, photography, printmaking, collage, and/or multimedia art. Students will use the creative process to create art works that reflect a wide range of subjects and will evaluate works using the critical analysis process. Students will also explore works of art within a personal, contemporary, historical, and cultural context. Studio fee will apply.
Prerequisite: Visual Arts, Grade 10 Open

AVI3M Visual Arts University/College Preparation
This course enables students to further develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, and printmaking, as well as the creation of collage, multimedia works, and works using emergent technologies. Students will use the critical analysis process when evaluating their own work and the work of others. The course may be delivered as a comprehensive program or through a program focused on a particular art form (e.g. photography, video, computer graphics, information design). Studio fee will apply.
Prerequisite: Visual Arts, Grade 10 Open

AVI4E1 Visual Arts Workplace
This course focuses on a practical approach to a variety of design projects related to the workplace. Students will use the creative process to produce a traditional and/or digital portfolio of their work in a variety of media. Students may focus on various aspects of visual arts including advertising, ceramics, fashion design, graphic arts, jewelry design, and/or web design.
Prerequisite: Visual Arts, Grade 11 Open

AVI4M Visual Arts University/College Preparation
This course focuses on enabling students to refine their use of the creative process when creating and presenting two- and three-dimensional art works using a variety of traditional and emerging media and technologies. Students will use the critical analysis process to deconstruct art works and explore connections between art and society. The studio program enables students to explore a range of materials, processes, and techniques that can be applied in their own art production. Students will also make connections between various works of art in personal, contemporary, historical, and cultural contexts. Studio fee will apply.
Prerequisite: Visual Arts, Grade 11 University/College or Open

ARTS (CONTINUED)

Dramatic Arts

ADA20 Drama Open

Qualifies as a Compulsory Group 2 Course

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

ADA30 Drama Open

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

ADA3M Drama University/College

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

Prerequisite: Drama, Grade 10 Open

ADA4M Drama University/College Preparation

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

Prerequisite: Drama, Grade 11, University/College Preparation

Music

AMU10 Instrumental Music Open

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

AMU20 Instrumental Music Open

Qualifies as a Compulsory Group 2 Course

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

Prerequisite: NAC10

AMV30 Vocal/Choral Music Open

This course emphasizes the creation and performance of vocal/choral 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 vocal/choral activities. They will also explore the function of music in society with reference to the self, communities, and cultures.

AMU3M Instrumental Music - University/College Preparation

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

Prerequisite: Music Grade 10 Open

AMU4M Instrumental Music - University/College Preparation

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

Prerequisite: Music, Gr. 11, University/College Preparation

Photography

***Students who wish to exceed basic course requirements will need to pay any additional cost involved.**

AWQ30 Photography Open

This course emphasizes the development of the knowledge and skills required for students to move from taking snapshots to making photographs. Students will develop an appreciation of the history of photography and form a basis for their aesthetic judgement through the analysis of photographs. Students will create photographs using a variety of techniques (e.g. camera and print) and technologies (e.g. traditional darkroom and digital). Prerequisite: Visual Arts Grade 9 or 10 Open

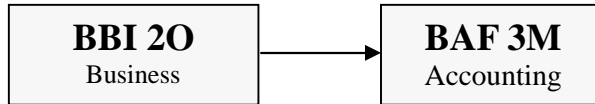
AWQ4M Photography University/College Preparation

This course focuses on the refinement of students' skills and knowledge in photography. Students will analyze photographs; use theories of photography in analyzing and producing photographs; and increase their understanding of stylistic and technological changes in modern and contemporary photography around the world, including Canada. Students will maintain a portfolio of their best works.

Prerequisite: Photography, Grade 11, Open

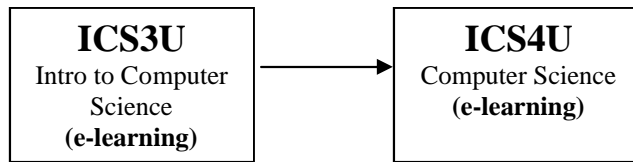
Possible Business Studies Pathways

College or University bound student with an interest in Accounting



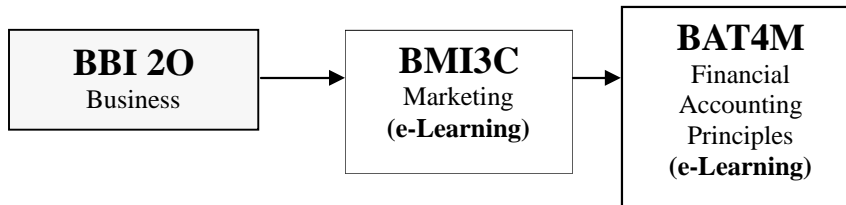
Business
Accounting
careers

College or University bound student with an interest in Computer Technology



Computer
engineering
Programming
careers

College bound student with an interest in Business Administration



Office administrator
Business Administration
careers

BUSINESS & COMPUTER STUDIES

BBI20 Introduction to Business Open
Qualifies as a Compulsory Group 2 Course
This course introduces students to the world of business. Students will develop an understanding of the functions of business, including accounting, marketing, information technology, human resources, and production, and of the importance of ethics and social responsibility. This course builds a foundation for further studies in business and helps students develop the business knowledge and skills they will need in their everyday lives.

BAF3M Financial Accounting Fundamentals
University/College Preparation
This course introduces students to the fundamental principles and procedures of accounting. Students will develop financial analysis and decision-making skills that will assist them in future studies and/or career opportunities in business. Students will acquire an understanding of accounting for a service and a merchandising business, computerized accounting, financial analysis, and current issues and ethics in accounting.

BMI3C Marketing: Goods, Services, Events
College Preparation
(Through an RCDSB e-Learning course)
This course introduces the fundamental concepts of product marketing, which includes the marketing of goods, services, and events. Students will examine how trends, issues, global economic changes, and information technology influence consumer buying habits. Students will engage in marketing research, develop marketing strategies, and produce a marketing plan for a product of their choice.

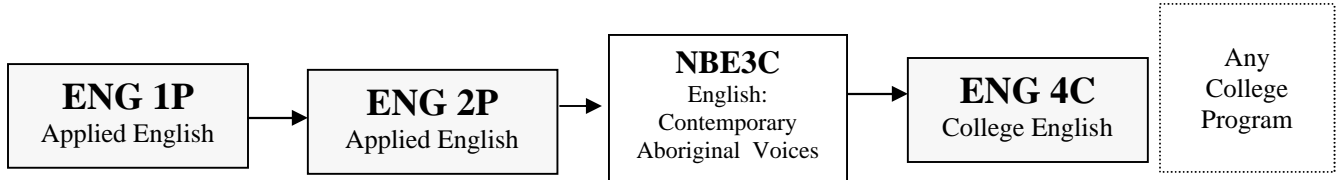
BAT4M Financial Accounting Principles
(Through an RCDSB e-learning course)
This course introduces students to advanced accounting principles that will prepare them for postsecondary studies in business. Students will learn about financial statements for various forms of business ownership and how those statements are interpreted in making business decisions. This course expands students' knowledge of sources of financing, further develops accounting methods for assets, and introduces accounting for partnerships and corporations.
Prerequisite: Financial Accounting fundamentals, Grade 11, University/ College Preparation

ICS3U Introduction to Computer Science
University Preparation
(Through an RCDSB e-learning course)
This course introduces students to computer science. Students will design software independently and as part of a team, using industry-standard programming tools and applying the software development life-cycle model. They will also write and use subprograms within computer programs. Students will develop creative solutions for various types of problems as their understanding of the computing environment grows. They will also explore environmental and ergonomic issues, emerging research in computer science, and global career trends in computer-related fields.
Prerequisite: Introduction to Computer Programming, Grade 11, College Preparation

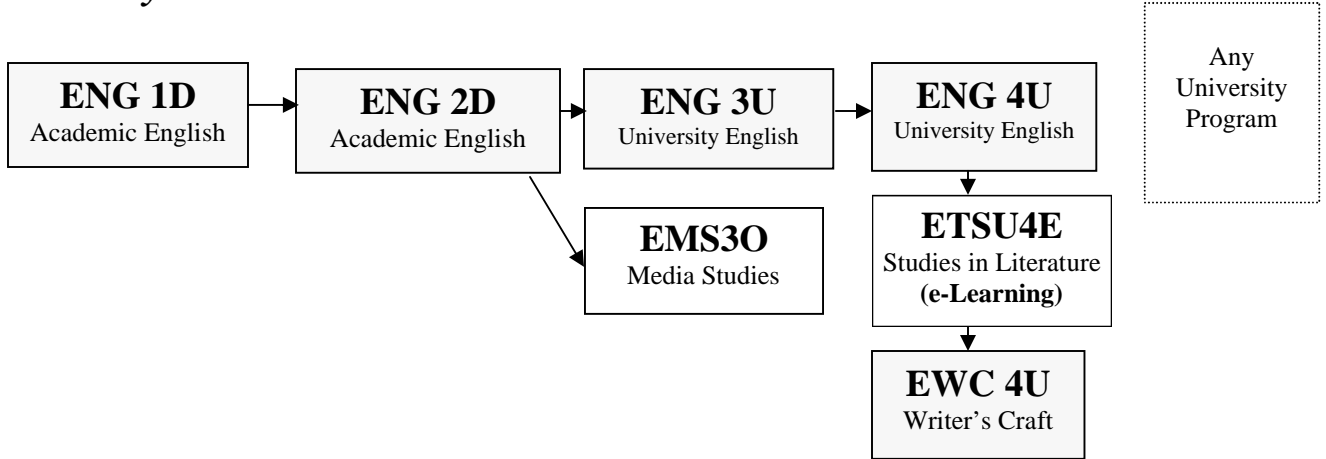
ICS4U Computer Science University Preparation
(Through an RCDSB e-learning course)
This course enables students to further develop knowledge and skills in computer science. Students will use modular design principles to create complex and fully documented programs, according to industry standards. Student teams will manage a large software development project, from planning through to project review. Students will also analyse algorithms for effectiveness. They will investigate ethical issues in computing and further explore environmental issues, emerging technologies, areas of research in computer science, and careers in the field.
Prerequisite: Introduction to Computer Science, Grade 11, University Preparation

Possible English Pathways

College bound or apprentice student requiring English skills

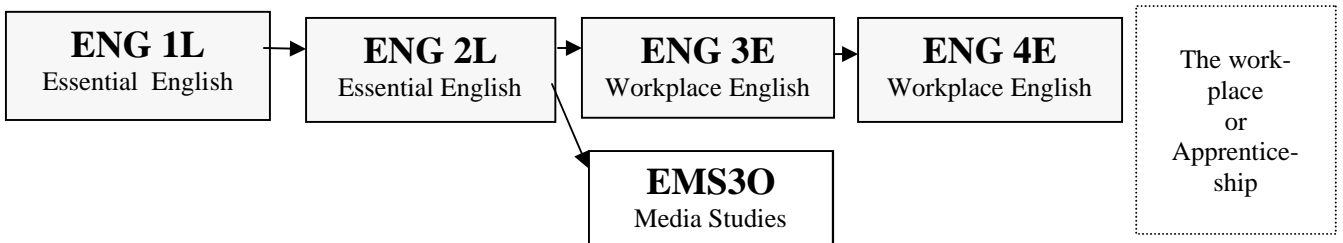


University bound Liberal Arts & Math/Science student



Note: EMS30, ETS4U & EWC4U do **not** count as one of the compulsory English credits.

Workplace bound student



ENGLISH

ENG1D English Academic
Compulsory Grade 9 Course

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

ENG1L English Locally Developed
Compulsory Grade 9 Course

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

ENG1P English Applied
Compulsory Grade 9 Course

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

ENG2D English Academic
Compulsory Grade 10 Course

This course extends the range of analytic, reading, writing, oral communication, and thinking skills that students need for success in secondary school academic programs. Students will study and interpret challenging texts from contemporary and historical periods, including novels, poems, plays, and opinion pieces, and will analyse and create effective media works. An important focus will be the thoughtful use of spoken and written language.
Prerequisite: ENG1D1 or ENG1P1

ENG2L English Locally Developed
Compulsory Grade 10 Course

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

Prerequisite: A Grade 9 English credit

ENG2P English Applied
Compulsory Grade 10 Course

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

Prerequisite: ENG1P1 or ENG1D1

EMS30 Media Studies Open
Qualifies as a Compulsory Group 1 Course

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

Prerequisite: ENP2P or ENG2D

(Offered Alternate years—offered 2012-13)

ENG3U English University Preparation

This course emphasizes the development of literacy, critical thinking, and communication skills. Students will analyse challenging texts from various periods; conduct research and analyse the information gathered; write persuasive and literacy essays; and analyse the relationship among media forms, audiences, and media industry practices. An important focus will be on understanding the development of the English language.

Prerequisite: ENG2D

NBE3C Contemporary Aboriginal Voices College Preparation
Compulsory Gr. 11 English

This course emphasizes the development of literacy, critical thinking, and communication skills through the study of works in English by Aboriginal writers. Students will study the content, form, and style of informational texts and literary and media works, and will develop an appreciation of the wealth and complexity of Aboriginal writing. Students will also write reports, correspondence, and persuasive essays, and analyse the relationship between media forms and audiences. An important focus will be on establishing appropriate voice and using business and technical language with precision and clarity. The credit earned for the Grade 11 Native Studies course English: Contemporary Aboriginal Voices is used to meet the Grade 11 English compulsory college credit requirement.

Prerequisite: ENG2P or ENG2D

ENG3E English Workplace Preparation

This course emphasized the development of literacy, critical thinking, and communication skills. Students will study the content, form, and style of informational texts and literacy works; write explanations, letters, and reports; and investigate the connections among media forms, audiences, and media industry practices. An important focus will be on using language clearly, accurately, and effectively in a variety of contexts.

Prerequisite: A Grade 10 English Credit

ENGLISH (continued)

ENG4C English College Preparation

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

Prerequisite: ENG3C or ENG3W

ENG4E English Workplace Preparation

This course emphasizes consolidation of literacy, critical thinking, and communication skills. Students will study informational texts and literature from various countries and cultures; and explain the connections among media forms, audiences, and media industry practices. An important focus will be on using specialized language related to the workplace accurately and coherently in appropriate contexts.

Prerequisite: A Grade 11 English Credit

ENG4U English University Preparation

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

Prerequisite: ENG3U

ETS4U Studies in Literature University Preparation

Qualifies as a Compulsory Group 1 Course
(Through a RCDSB e-Learning course)

This course is for students with a special interest in literature and literary criticism. The course may focus on themes, genres, time periods, or countries. Students will analyse a range of forms and stylistic elements of literary texts and respond personally, critically, and creatively to them. They will also assess critical interpretations, write analytical essays, and complete an independent study project. By the end of this course students will have gained social, cultural, and political awareness by exploring human nature through literature.

Prerequisite: ENG3U

EWC4U1 The Writer's Craft University Preparation

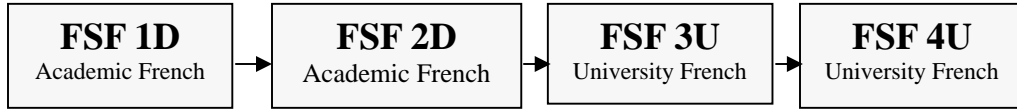
Qualifies as a Compulsory Group 1 Course

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

Prerequisite: ENG3U

Possible French Language Pathways

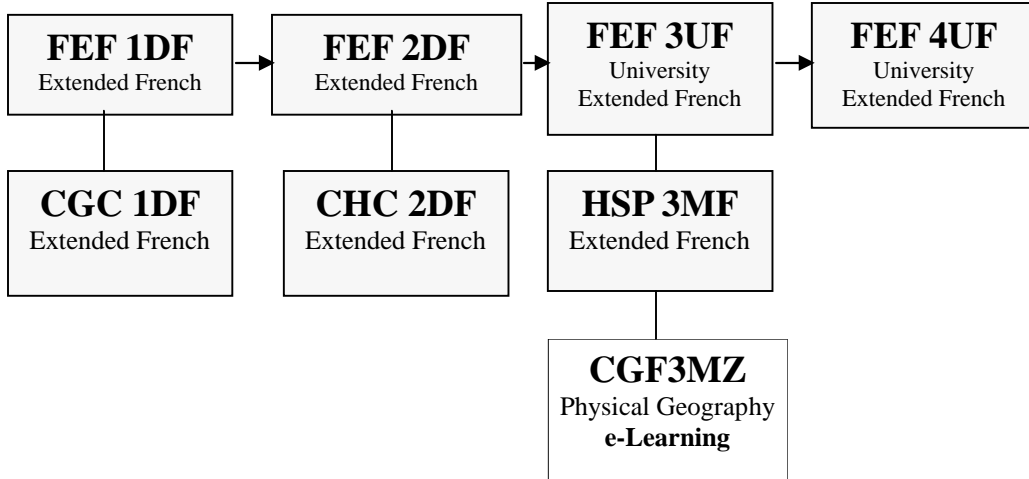
University bound language student



Education
Public Service
careers

Note: Students completing all four Academic French courses and achieving Level 3 in at least 3 of the 4 courses are eligible to receive the **Core French Achievement Certificate** upon graduating

University bound language student or a student wishing to study at a French Language University



Education
Public Service
careers

Note: Students must complete all seven Extended French courses in order to receive the **Gold Certificate**.

Note: Students must complete six Extended French Courses (four Extended French Grammar Courses and two Extended Subject Specific Courses) in order to receive the **Silver Certificate**.

FRENCH

EXTENDED FRENCH -

FEF1D Extended French Academic

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

FEF2D Extended French Academic

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

FEF3U Extended French University Preparation

This course focuses on developing French-language skills through the study of Canadian francophone authors. Students will analyze a range of works and produce written assignments in a variety of genres, including the formal essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.
Prerequisite: Extended French Grade 10, Academic
(*Offered Alternate Years— Offered in 2012-2013)

FEF4U Extended French University Preparation

This course emphasizes the refinement of French-language skills through the study of Canadian and international francophone literature. Students will interpret literary works, produce written assignments in a variety of genres, and conduct research on a major topic for a written and oral presentation. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course.
Prerequisite: Extended French, Grade 11, University Preparation
(*Offered Alternate Years— Offered in 2013-2014)

CGC1DF Geographie du Canada (Immersion)

Qualifies as a Compulsory Grade 9 Course
Same as CGC1D1 except that it is presented in French.

CHC2DF Histoire du Canada du Premiere Guerre Mondiale

Qualifies as a Compulsory Grade 10 Course
Same as CHC2D1 except that it is presented in French. We will be using the texte Regarde sur le Canada.
(*Offered Alternate Years— Offered in 2013-2014)

CGF3MZ Physical Geography: Patterns, Processes, and Interactions
(Through an RCDSB e-Learning course)

This course is the same as CCF3M1 except that it is presented in French.

HSP3M Introduction to Anthropology, Psychology and Sociology in French

This course is the same as HSP3M1 except that it is presented in French.
(*Offered in Alternate Years—Offered in 2012-2013)

CORE FRENCH -FSF1D Core French Academic
Compulsory Grade 9 Course

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

FSF1P Core French Applied
Compulsory Grade 9 Course

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

FSF2D Core French Academic
Elective Course

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

Prerequisite: Core French, Grade 9, Academic or Applied

FSF3U Core French University Preparation

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

Prerequisite: Core French Grade 10 Academic

FSF4U Core French University Preparation

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

Prerequisite: Core French, Grade 11 University Preparation

GUIDANCE & CAREER EDUCATION

-Preparing Students for a Complex & Changing World-
Introduction

Planned learning experiences that take place in the community, including job shadowing and job twinning, work experience and virtual work experience, and co-operative education, provide students who are enrolled in courses of all types and in all disciplines with the opportunity to enhance their school programs. Experiential learning can assist all students, including exceptional students, who are bound for university, college, apprenticeship, or the workplace, in making career decisions as well as in developing the knowledge, skills, and attitudes that are essential in today's society. All forms of experiential learning are a valuable complement to students' academic experience and preparation for the future. At Fellowes, experiential and career education programs are organized in a sequential fashion to meet career development needs. This encourages the maximizing of student growth and development.

GLC20 Career Studies (1/2 credit)

Compulsory Grade 10 Course

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. To be paired with CHV20 Civics (refer to page 40)

GWL30 Designing Your Future Open

Qualifies as a Group One Compulsory

This course prepares students to make successful transitions to postsecondary destinations as they investigate specific postsecondary options based on their skills, interests, and personal characteristics. Students will explore the realities and opportunities of the workplace and examine factors that affect success, while refining their job search and employability skills. Students will expand their portfolios with a focus on their targeted destination and develop an action plan for future success. Prerequisite: Career Studies, Grade 10, Open

COP308/COP408/COP409 CO-OPERATIVE EDUCATION- *Co-Op: It's Working* -

Qualifies as a Group One or Group Two or Group Three Compulsory.

Co-operative Education is a different and exciting form of education which can assist all students as they prepare to participate in the global economy of the future. In an experiential mode of learning, delivered under Ministry of Education subject guidelines, co-operative education integrates academic study and classroom theory with experiences at the worksite. At Fellowes High School, co-operative education is the direct link to apprenticeship training through the Ontario Youth Apprenticeship Program.

Co-op Office is open from 8:00 to 3:00
Telephone (613) 735-5838 or
735-6858 Ext. 514 (voice mail available 24 hours)

- Admission Criteria

1. Student must be at least 16 years of age.
2. Student under the age of 18 must have the written permission of his/her parent/guardian.
3. Student must have successfully completed at least 16 credits.
4. Student must have successfully completed or be enrolled in a senior level course (at least grade 11) in a related subject area for the placement requested:
E.g. BAF3M1 or BAI3E1 for an Accounting co-op placement
5. Must have successfully completed an interview.

How to Apply

1. On the Registration and Course Selection Form, circle and enter COP308, COP408 or COP309 on the lines provided for Co-op on the course selection card. Co-op selections are made as two of your 8 courses.
2. List two choices of the type of placement you would prefer. List your placement choices as types of jobs (e.g. hairstylist, nurse assistant, teacher assistant, travel agent, etc). Go to the Co-op office if you require assistance identifying placement choices.
3. **NO OUT OF SCHOOL PLACEMENT CAN PRECEDE COMPLETION OF THE APPROPRIATE IN-SCHOOL COMPONENT, HOWEVER IT CAN BE DONE CONCURRENTLY WITH THE IN-SCHOOL COMPONENT.**

GUIDANCE & CAREER EDUCATION (continued)

GPP307 CO-OP TA (Single credit)

Qualifies as a Group One or Group Two or Group Three Compulsory

Co-op TA prepares and motivates students to provide leadership and assistance to others in their schools and communities.

Admission Criteria—

1. Be a senior student.
2. Have a minimum of 16 credits.
3. Have a keen interest and a high level of competency in the subject area she or he is assisting.
4. Fill out application in co-op office.

OYAP—What is it?

Ontario Youth Apprenticeship Program—OYAP is a planned and monitored school-work program that allows students to learn a skilled trade while at the same time earning credits toward their Ontario Secondary School Diploma. This program allows students to accumulate hours towards the successful completion of an apprenticeship program as well as to earn credit for some of the learning objectives of a skilled occupation.

Students interested in OYAP must apply to the Co-op Educational program—please see application procedure for Co-op Education in this booklet.

Admission Criteria—

All students participating in OYAP must:

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

INTERDISCIPLINARY STUDIES IN THE CURRICULUM

The Place of Interdisciplinary Studies in the Curriculum

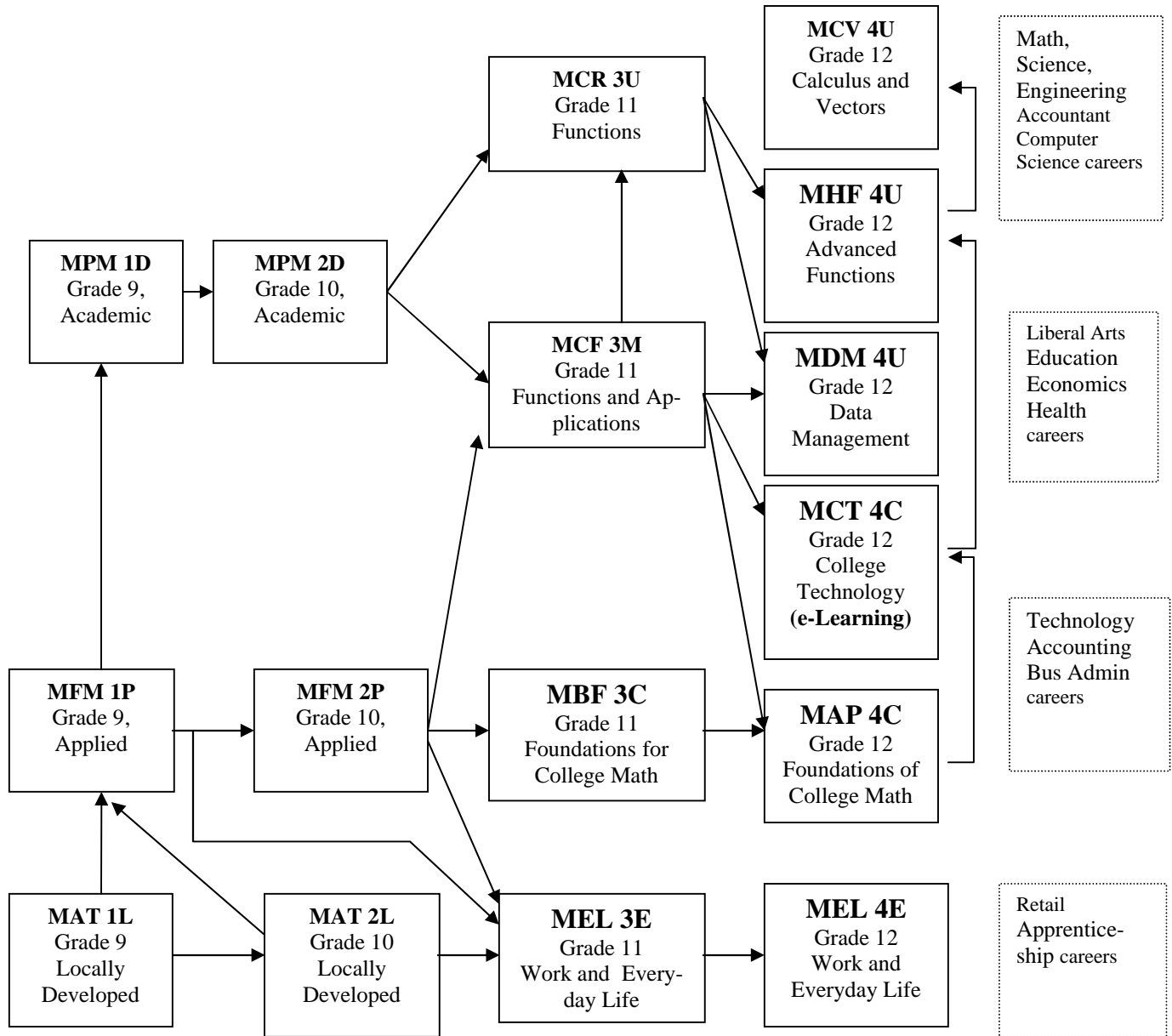
Our world is increasingly interconnected and interdependent. Communications networks exchange information around the globe, creating new forms of collaboration and transforming the nature of work and learning. New areas of study develop to advance human knowledge and respond to the challenges of our changing world with insight and innovation.

To deal with today's issues, students require interdisciplinary skills that focus on the issues themselves, especially skills related to the research process, information management, collaboration, critical and creative thinking, and technological applications. Students need to know new methods and forms of analysis, interpretation, synthesis, and evaluation that will allow them to build on skills acquired through the core curriculum. Interdisciplinary practitioners can use modern systems-thinking and systems-design approaches to investigate how lasting solutions take into account all external and internal factors. Using models and prototypes, students can simulate ideas and test variables to produce new products or perspectives or find and implement solutions that go beyond established disciplines.

R.I.S.E. Riding Into Successful Experiences:

This program is a unique experiential learning opportunity. Students take 1 or 2 compulsory credits by correspondence in the student success room for 2 mornings per week. The remaining 3 days are spent earning Co-op credits at a barn in Beachburg. Here the students assist with chores, feeding and regular horse farm maintenance. In the afternoons, the owner provides riding lessons. There is potential to earn 3 co-operative education credits and 2 compulsory credits for a total of 5 credits in a semester. See a guidance counselor for this individualized program.

Mathematics Department Pathways



MATHEMATICS

MAT1L Mathematics Locally Developed
Compulsory Course

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

MPM1D Principles of Mathematics Academic
Compulsory Grade 9 Course

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

MF1P Foundations of Mathematics Applied
Compulsory Grade 9 Course

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

MAT2L Mathematics Locally Developed
Compulsory Course

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 Grade 11 and Grade 12 Mathematics 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 skills and to continue developing their skills in reading, writing, and oral language through relevant and practical math activities.

Prerequisite: A Grade 9 Mathematics credit

MPM2D Principles of Mathematics Academic
Compulsory Grade 10 Course

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

Prerequisite: Mathematics, Grade 9, Academic

MF2P Foundations of Mathematics Applied

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

Prerequisite: Mathematics, Grade 9, Academic or Applied

MBF3C Foundations for College Mathematics
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, analysing, 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

MCR3U Functions 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

MCF3M Functions and Applications University/College Preparation

This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in modeling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to financial and trigonometric applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Prerequisite: Principles of Mathematics Grade 10 Academic or Foundations of Mathematics, Grade 10, Applied Grade 11, University Preparation

MEL3E Mathematics for Work and Everyday Life
Workplace Preparation

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

Prerequisite: Mathematics Grade 9 Academic, Applied or Locally Developed

*(Offered alternate years—offered in 2012-2013)

MATHEMATICS - (continued)**MAP4C Foundations for College Mathematics
College Preparation**

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; 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

**MCT4C Mathematics for College Technology College Preparation
(Through an RCDSB e-learning course)**

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

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

**MCV4U Calculus and Vectors
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 in university and who may choose to pursue careers in fields such as physics and engineering.

Prerequisite: Advanced Functions, Grade 12, University Preparation

*Please note that the prerequisite for MCT4C1 is Grade 11 Functions at the UNIVERSITY PREP. LEVEL or Functions at the UNIVERSITY/ COLLEGE PREP. LEVEL.

**MDM4U Mathematics of Data Management
University Preparation**

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

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

**MEL4E Mathematics for Work and Everyday Life
Workplace Preparation**

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

Prerequisite: Mathematics for Work and Everyday Life Gr. 11 Workplace Preparation

*(Offered alternate years—offered in 2013-2014)

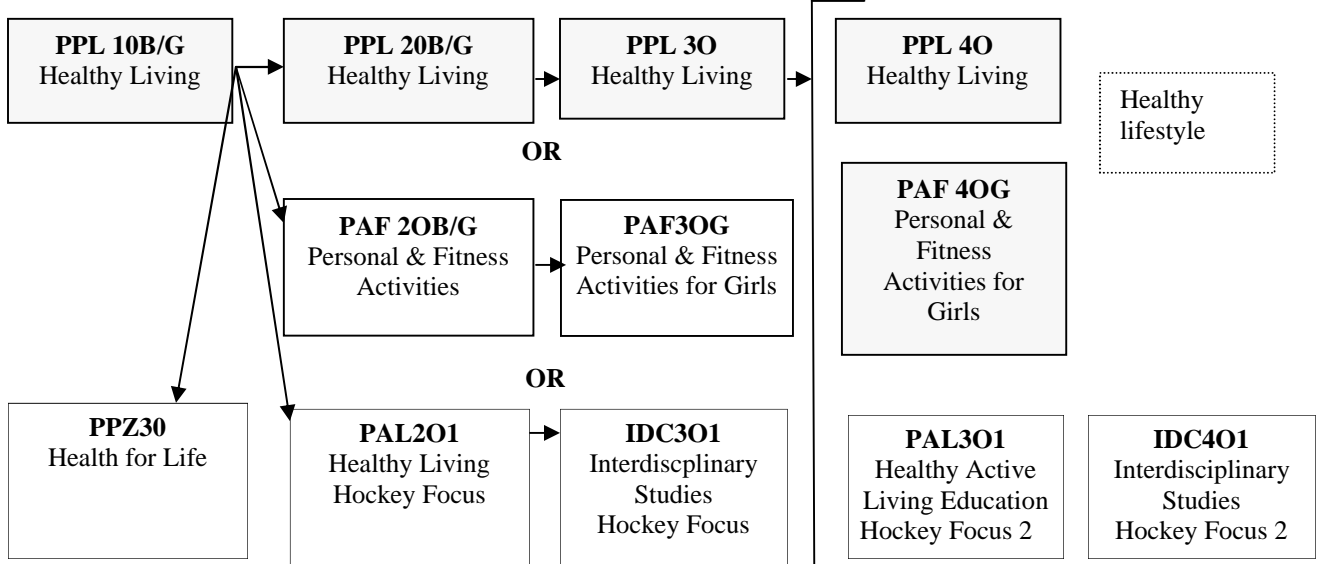
MHF4U Advanced Functions University Preparation

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.

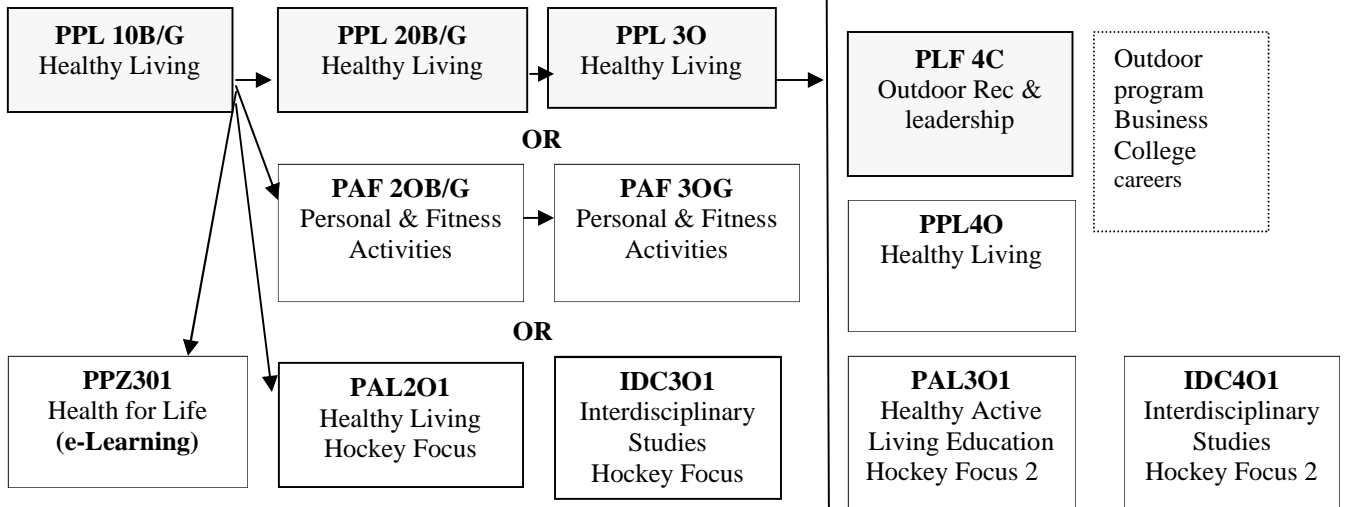
Prerequisite: Functions Grade 11 University Preparation, or Mathematics For College Technology, Grade 12, College Preparation

Possible Physical Education Pathways

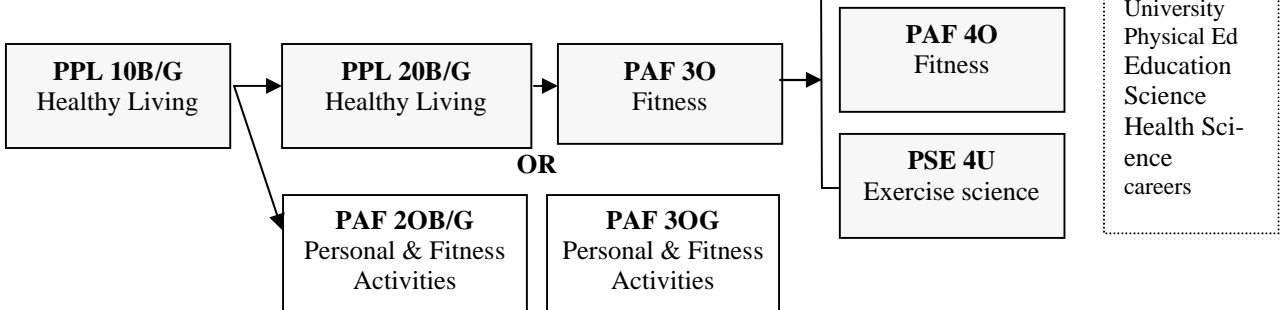
Staying Healthy



College bound or Outdoor Training student



University bound Kinesiology Phys. Ed. student



Health & Wellness Specialist High Skills Major

Categories of Required Credits	APPRENTICESHIP TRAINING PATHWAY		COLLEGE PATHWAY		UNIVERSITY PATHWAY		WORKPLACE PATHWAY	
	Grade 11	Grade 12	Grade 11	Grade 12	Grade 11	Grade 12	Grade 11	Grade 12
Major Credits 2 Required each year	PAF301 PAL301 PPL301 PPZ30E	PAF 401 PLF4C1 PPL401	GPP301 PAF301 PAL301 PPL301 PPZ30E	PAF401 PLF4C1 PPL401	GPP301 PAF301 PAL301 PPL301 PPZ30E	PAF401 PPL401 PSE4U1	GPP301 PAF301 PAL301 PPL301 PPZ30E	PAF401 PLF4C1 PPL401
	TXJ3E1	TXJ4E1	TXJ3E1	TXJ4E1			TXJ3E1	TXJ4E1
English Credits	ENG3E1 OR ENG3C1	ENG4C1 OR ENG4E1	ENG3C1	ENG4C1	ENG3U1	ENG4U1	ENG3E1	ENG4E1
Math Credits	<i>MBF3C1</i> OR <i>MEL3E1</i>		<i>MBF3C1</i>		<i>MBF3C1</i> OR <i>MCR3U1</i>	<i>MDM4U1</i>	<i>MEL3E1</i>	
Social Science or Science Credits 1 only	HPW3C1 SBI3C1		HSP3M1 HPW3C1 SBI3C1 SCH3C1 SVN3M1	HFA4M1 HSB4M1 SCH4C1 SPH4C1	HSP3M1 SBI3U1 SCH3U1 SPH3U1 SVN3M1	HFA4M1 HSB4M1 HZT4U1 SBI4U1 SCH4U1 SPH4U1	HPW3C1 SVN3E	
Cooperative Education Credits	2 COOP TIED TO MAJOR CREDIT		2 COOP TIED TO MAJOR CREDIT		2 COOP TIED TO MAJOR CREDIT		2 COOP TIED TO MAJOR CREDIT	

PHYSICAL EDUCATION

*Please note that all Physical Education courses require a Physical Education uniform which may be purchased for approx. \$30. Courses may offer other activities with additional costs.

PPL10B Healthy Active Living Education (Boys) Open
 PPL10G Healthy Active Living Education (Girls) Open
 Compulsory Course

This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Students will learn movement skills and principles, ways to improve personal fitness and physical competence, and safety and injury prevention. They will investigate issues related to healthy sexuality and the use and abuse of alcohol, tobacco and other drugs and will participate in activities designed to develop goal-setting, communication, and social skills. GIRLS will be asked to pay a \$22 fee for the self defense instruction provided in this course.

PPL20B Healthy Active Living Education (Boys)
 PPL20G Healthy Active Living Education (Girls)
 Qualifies as a Group 2 Compulsory Course

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. GIRLS will be asked to pay a \$22 fee for the advanced self defense instruction provided in this course.

PAF20B Personal and Fitness Activities (Boys)
 PAF20G Personal and Fitness Activities (Girls)
 Qualifies as a Group 2 Compulsory Course

The learning expectations are the same as PPL20G & PPL20B. This course however will focus on building on each student's physical fitness levels. Opportunities for experiencing a variety of active lifestyle activities will be provided. The student who has a greater interest in non competitive, low organizational and community activities will enjoy this course variety. Some activities may be offered in a co-ed setting.

PAF30 Personal & Fitness Activities Open

This course focuses on the training and conditioning of competitive athletes. Playing strategies, advanced sport skills and regular high-end fitness sessions are taught. Students will assess personal fitness levels and set goals, along with develop and practice a personal plan. In addition, students will keep a journal of progress, results, goals improvements, observations, and feelings on a regular basis. Students who take this course must be intrinsically motivated and should be able to work independently.

PAF30G Personal & Fitness Activities for Girls Open

This course is specific to women who are interested in experiencing a wide variety of fitness and recreational activities that will promote lifelong healthy active living. Trips to local facilities will compliment the course so a small transportation fee will be required to support the trip. Students will also participate in a self-defense course at a cost of approximately \$20. In addition, this course will encourage the development and implementation of a personal fitness plan, examine the components of healthy relationships, reproductive health, mental health and personal safety. (Offered alternate years—offered 2013-2014)

PPL30 Healthy Active Living Education 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, coping, social, and interpersonal skills. (continued)

PPL30 Healthy Active Living Education (cont'd)

Students will also study the components of healthy relationships, reproductive health, mental health, and personal safety. Students leisure and recreational activities will cost approximately \$20 per student.
 Prerequisite: None

PPZ30 Health for Life
 (Through RCDSB e-Learning)

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

PAF40 Personal Fitness

Personal fitness and conditioning strategies are enhanced through regular physical training and research into related topics. Training sessions will focus on improvement of strength, speed & agility, flexibility, and cardiovascular endurance. Emphasis will be placed upon technique training progress & remedies, and nutritional education.
 Prerequisite: Any grade 11 open course in Health & Physical Education.

PAF40G Personal and Fitness Activities for Girls Open
 Qualifies as a Group 2 Compulsory Course

This course has been specially designed for women in Grades 10-12. Its focus will involve participation in community recreational activities, which may include trips to local facilities. Activities could include aerobics, dance, curling, skating, biking, bowling, gymnastics, as well as additional activities chosen by the class members. Trips will require a small fee to cover the cost of transportation. This course focuses on the development of a personalized approach to healthy 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. (Offered alternate years—Offered in 2012-2013)

PPL40 Healthy and Active Living 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.

PLF4C Recreation and Fitness Leadership
 College Preparation

This course focuses on the development of leadership and coordination skills related to recreational activities. Students will acquire the knowledge and skills required to plan, organize, and implement recreational events. They will also learn how to promote the value of physical fitness, personal well-being, and personal safety to others through mentoring. The course will prepare student for college programs in recreational, leisure, and fitness leadership. Field trips will require approx. 6-8 school days away, with costs estimated at \$150-\$200 per student. Students must fill out an application to be selected.
 Prerequisite: Any grade 11 or 12 Open Physical Education course

PHYSICAL EDUCATION (continued)

PSE4U Exercise Science University Preparation

This course focuses on the study of human movement and of systems, factors, and principles involved in human development. Students will study the effects of physical activity on health and performance, the evolution of physical activity and sports, and the factors that influence an individual's participation in physical activity. The course will prepare students for university programs in physical education, kinesiology, recreation, and sports administration. There is a \$15 fee for the workbook.

Prerequisites: Any Grade 11 university OR university/college preparation course in science OR any Grade 11 or 12 open course in health & physical education.



FELLOWES HIGH SCHOOL IS A FULLY LICENSED HOCKEY CANADA SKILLS ACADEMY

Note: The HCSA program features a professional curriculum developed and endorsed by Hockey Canada and delivered by certified skills instructors. This program also features the following elements:

- It is a double credit program—PAL201 and IDC301 or PAL301 AND IDC401— students will earn two credits
- It is open to both males and females regardless of their hockey ability level
- Students will receive close to 30 hours of on-ice instruction
- Innovative training techniques and equipment will be utilized during both the on-ice and off-ice component— radar guns, slide boards, attack triangles, skate weights, floorball, etc.
- The student registration fee for this program is \$300.00

PAL201 Healthy Active Living Education— Hockey Focus

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. The game of hockey will serve as the vehicle through which students will achieve the expectations.

IDC301 Interdisciplinary Studies—Hockey Focus

The interdisciplinary studies portion includes history, business & biomechanics related to the game of hockey and First Aid certification.

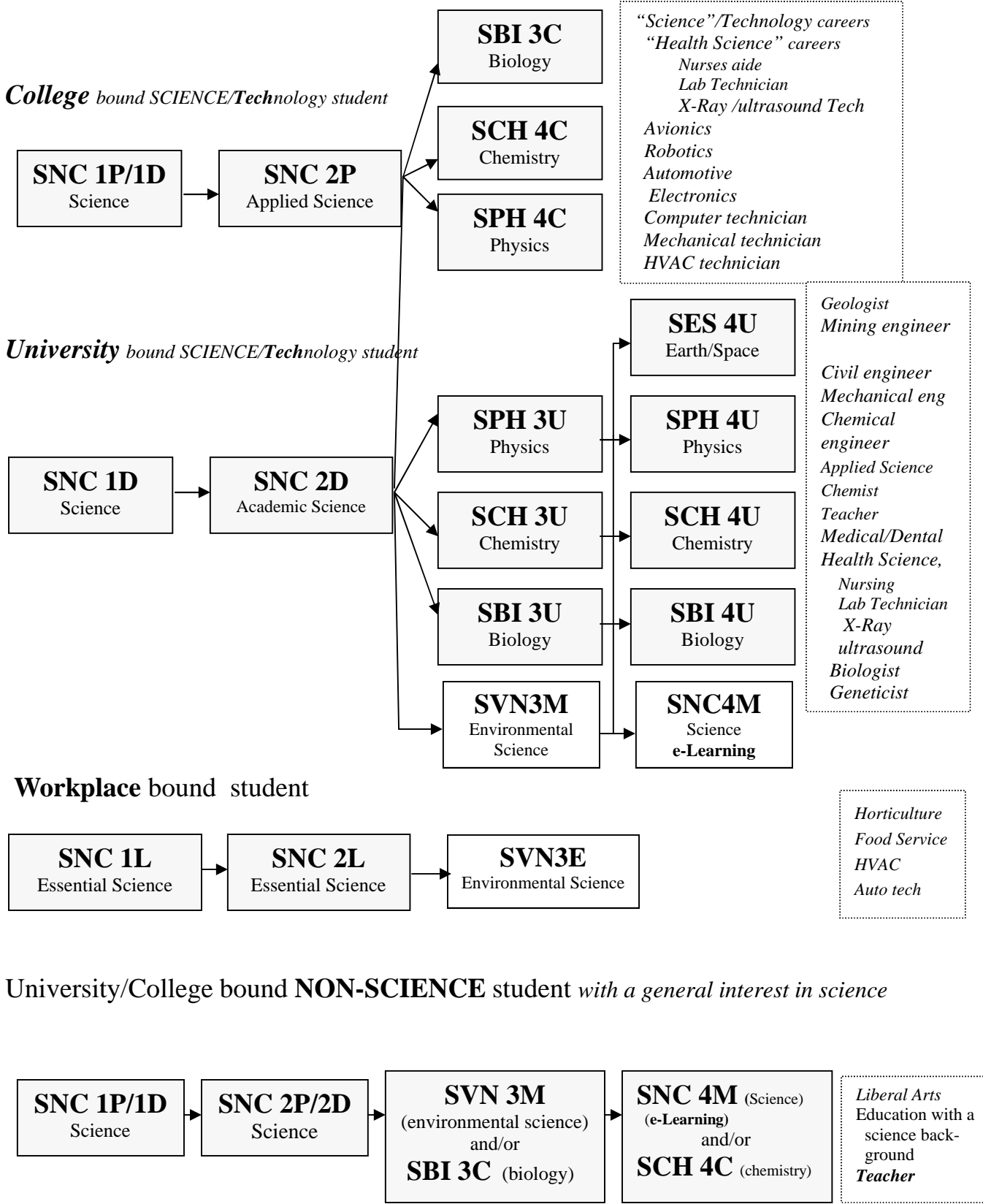
PAL301 Healthy Active Living Education - Hockey Focus 2

This course emphasizes regular participation in a variety of physical fitness training activities, skills and drills. Students will further develop personal competence and enhance specific movement skills through the game of hockey. They will examine issues related to healthy relationships, healthy reproduction, mental health, personal safety and injury prevention and practice goal-setting, decision-making, social and interpersonal skills.

IDC401 Interdisciplinary Studies - Hockey Focus 2

The interdisciplinary studies portion includes, sport psychology, NCCP Coaching Certification: Fundamental Movement Skills, leadership, and social issues in hockey

Possible Science Pathways



SCIENCE

SNC1D Science Academic
Compulsory Course

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

SNC1L Science Locally Developed
Compulsory Course

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

SNC1P Science Applied
Compulsory Course

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

SNC2D Science Academic
Compulsory Course

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

SNC2L Science Locally Developed
Compulsory Course

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

Prerequisite: Science Grade 9, Locally Developed

SNC2P Science 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

SBI3C Biology 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

SBI3U Biology 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 functions 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

SCH3U Chemistry 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 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; 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

SVN3M Environmental Science University/College Preparation

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

Prerequisite: Science, Grade 10, Applied or Academic

SCIENCE (continued)

SVN3E Environmental Science Workplace Preparation
 This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in work and life after secondary school. Students will explore a range of topics, that will help them succeed in work and life after secondary school. Students will explore a range of topics, including the impact of human activities on the environment; human health and the environment; energy conservation; resource science and management; and safety and environmental responsibility in the workplace. Emphasis is placed on relevant, practical applications and current topics in environmental science, with attention to the refinement of students' literacy and mathematical literacy skills as well as the development of their scientific and environmental literacy.
 Prerequisite: Science Grade 9, Academic or Applied or a Grade 9 or 10 Locally Developed Compulsory Credit (LDCC) in science

SCH4C Chemistry 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 environment. Students will use a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment.
 Prerequisite: Science Grade 10 Academic or Applied

SPH4C Physics College Preparation
 This course develops students' understanding of the basic concepts of physics. Students will explore these concepts with respect to motion; mechanical, electrical, electrical, electromagnetic, energy transformation, hydraulic and pneumatic systems; and the operation of commonly used tools and machines. They will develop their scientific skills as they test laws of physics and solve both assigned problems and those emerging from their investigations. Students will also consider the impact of technological applications of physics on society and the environment.
 Prerequisite: Science Grade 10 Academic or Applied

SNC4M Science University/College Preparation
 (Through an RCDSB e-learning course)
 This course enables students, including those pursuing post-secondary programs outside the sciences, to increase their understanding of science and contemporary social and environmental issues in health-related fields. Students will explore a variety of medical technologies, pathogens and disease, nutritional science, public health issues, and biotechnology. The course focuses on the theoretical aspects of the topics under study and helps refine students' scientific investigation skills.
 Prerequisite: Grade 10 Science Academic or any Grade 11 Science, University University/College or College Course

SBI4U Biology 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 University Preparation
 This course enables students to deepen their understanding of chemistry through the study of organic chemistry, the structure and properties of matter, energy changes and rates of reaction, equilibrium in chemical systems, and electrochemistry. Students will further develop their problem-solving and investigation skills as they investigate chemical processes, and will refine their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in everyday life, and on evaluating the impact of chemical technology on the environment.
 Prerequisite: Chemistry, Grade 11, University Preparation

SPH4U Physics University Preparation
 This course enables students to deepen their understanding of physics concepts and theories. Students will continue their exploration of energy transformations and the forces that affect motion, and will investigate electrical, gravitational, and magnetic fields and electromagnetic radiation. Students will also explore the wave nature of light, quantum mechanics, and special relativity. They will further develop their scientific investigation skills, learning, for example, how to analyse, qualitatively and quantitatively, data relating to a variety of physics concepts and principles. Students will also consider the impact of technological applications of physics on society and the environment.
 Prerequisite: Physics, Grade 11, University Preparation

SES4U Earth and Space Science University Preparation
 This course develops students' understanding of Earth and its place in the universe. Students will investigate the properties of and forces in the universe and solar system and analyse techniques scientists use to generate knowledge about them. Students will closely examine the materials of Earth, its internal and surficial processes, and its geological history, and will learn how Earth's systems interact and how they have changed over time. Throughout the course, students will learn how these forces, processes, and materials affect their daily lives. The course draws on biology, chemistry, physics, and mathematics in its consideration of geological and astronomical processes that can be observed directly or inferred from other evidence.
 Prerequisite: Grade 10 Science, Academic

Possible Social Science Pathways

College bound Social Science or Liberal Arts student

CGC 1P/1D
Geography of Can-

CHC 2P
Canadian History

CHV 20
GLC 20
Civics/Careers

NAC201
Aboriginal Peoples
In Canada

CHT30
World History-
Since 1900

HNC30E
Fashion & Creative
Expression

HPW 3C
Working with
children

HSP 3M
Sociology

CLU 3M
Canadian Law

NBV3C
Aboriginal Beliefs,
Values

HFA4M
Food & Nutrition

HSB 4M
Challenge &
Change

HHS4ME
Individuals & Families
in a Diverse Society
e-Learning

CGR4M
Environmental &
Resource Management
(e-learning)

CHY4C
World History -
Modern

Early Childhood
Education
Nutrition & Applied
Sciences Dietician
careers

Public
Service
Legal
Assistant

Police Foundations
Travel &
Tourism
careers

Environmental
Studies

University bound Social Science or Liberal Arts student

CGC 1D
Geography of
Canada

CHC 2D
Canadian History

CHV 20
GLC 20
Civics/Careers

NAC201
Aboriginal Peoples
In Canada

HRT3ME
World Religions
e-Learning

HSP 3M
Sociology

CHW 3M
World History-
Ancient

CHT30
World History-
Since 1900

CLU 3M
Canadian Law

CGF3MZ
Physical Geography
e-Learning

HHS4ME
Individuals & Families
in a Diverse Society
e-Learning

HSB 4M
Challenge & Change

CLN 4U
International Law

CGW 4U
Canadian & World
Issues

HZT 4U
Philosophy

HFA4M
Food & Nutrition

CGR4M
Environmental &
Resource Management
(e-learning)

Education
Politics
Economics

International
Studies
Criminology

Journalism
Public
Service
Analyst

Early Child-
hood Educa-
tion
Nutrition &
Applied
Sciences Dieti-
cian careers

Environmental
Studies

SOCIAL SCIENCES

CGC1D Geography of Canada Academic
Compulsory Course

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

CGC1P Geography of Canada Applied
Compulsory Course

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

CHC2D Canadian History Since World War I
Academic
Compulsory Course

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

CHC2P Canadian History Since World War I
Applied Compulsory Course

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

CHV2O Civics Open (1/2 credit)
Compulsory Course

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

To be paired with GLC201 Career Studies. (Refer to page 27).

NAC201 Aboriginal Peoples in Canada Open

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

CGF3MZ Physical Geography: Patterns, Processes, and Interactions
University/College Preparation
(through RCDSB e-Learning course—offered in French only)

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

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

CHT3O World History Since 1900: Global and Regional Perspectives
Open

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

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

CHW3M World History to the Sixteenth Century
University/College Preparation

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

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

CLU3M Understanding Canadian Law University/College Preparation

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

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

HNC3O Fashion and Creative Expression Open
(Through a RCDSB e-Learning course)

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

HRT3M World Religions: Beliefs, Issues, and Religious Traditions
University/College Preparation
(Through a RCDSB e-Learning course)

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

HSP3M Introduction to Anthropology, Psychology
and Sociology University/College Prep.

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

Prerequisite: Grade 10 Canadian History, Academic or Applied

HPW3C Living and Working With Children College Preparation

This course focuses on the well-being of children in families and community settings. Students will study child behaviour and child development in the context of relationships with parents and others in the community, and will learn through research and by observing and interacting with children.

This course prepares students for further study of children, familiarizes them with occupational opportunities related to working with children, and introduces them to skills used in researching and investigating children's behaviour in response to others. This course links well with TPO4C1.

Prerequisite: Grade 10 Canadian History, Academic or Applied

SOCIAL SCIENCES (continued)

NBV3C Aboriginal Beliefs, Values, and Aspirations in Contemporary Society
College Preparation
This course focuses on the beliefs, values, and aspirations of Aboriginal peoples in Canada. Students will examine world views of Aboriginal peoples and the political, economic, cultural, and social challenges facing individuals and communities. Students will also learn how traditional and contemporary beliefs and values influence the aspirations and actions of Aboriginal peoples.
Prerequisite: Aboriginal Peoples in Canada, Grade 10, Open or Canadian History in the Twentieth Century, Grade 10, Academic or Applied

CGR4M/4E The Environment and Resource Management
Workplace Preparation
(Through an RCDSB e-learning course)
This course examines the influence of human activities on the natural environment. Students will study ecosystem structures and processes, the ecological impact of human activities, and methods of responsible resource management. Students will apply geotechnologies and geographic inquiry methods to develop and present practical solutions to environmental and resource-management issues. In the process, students' problem-solving and communication skills will be enhanced in preparation for careers and the workplace.
Prerequisite: Grade 9 Geography of Canada, Academic or Applied

CGW4U Canadian and World Issues: A Geographic Analysis
University Preparation
This course examines the global challenges of creating a sustainable and equitable future, focusing on current issues that illustrate these challenges. Students will investigate a range of topics, including cultural (different beliefs of social groups), economic (how money relates to power), and geopolitical relationships (the world's response to global terrorism), regional disparities in the ability to meet basic human needs (why there is widespread poverty), and protection of the natural environment (climate change and possible solutions). Students will use geo-technologies (GIS) and skills of geographic inquiry and analysis to develop and communicate balanced opinions about the complex issues facing Canada and a world that is interdependent and constantly changing
Prerequisite: Any University or University/College preparation course in Canadian and world studies, English or social sciences and humanities

CHY4C World History: The West and the World
College Preparation
This course explores the last five hundred years of world history, emphasizing the interaction between the West and other regions of the world. CHY4C examines the Renaissance world of Leonardo da Vinci, the growth in the influence of science, the violent French Revolution and Napoleon and the transition of the West from an agricultural to an industrial society. Students will learn about a variety of economic, social, and political systems and the changes they have undergone over time. Students will apply their developing skills of historical inquiry to understand and communicate ideas about the forces that have formed our modern world.
Prerequisite: Any university, university/college, or college preparation course in Canadian and World Studies, English, or social sciences and humanities

CLN4U Canadian and International Law
University Preparation
This course examines elements of Canadian & international law in social, political, & global contexts. Students will study the historical & philosophical sources of law & the principles & practices of international law & will learn to relate them to issues in Canadian society & the wider world. Students will use critical-thinking & communication skills to analyse legal issues, conduct independent research, & present the results of their inquiries in a variety of ways.
Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities

HFA4M Food and Nutrition Sciences, Grade 12
University/College Preparation
This course examines various nutritional, psychological, social, cultural, & global factors that influence people's food choices & customs. Students will learn about current Canadian & worldwide issues related to food, frameworks for making appropriate dietary choices, & food-preparation techniques. This course also refines students' skills used in researching & investigating issues related to food & nutrition.
Prerequisite: Any university, university/college, or college prep course in social sciences & humanities, English, or Canadian & world studies

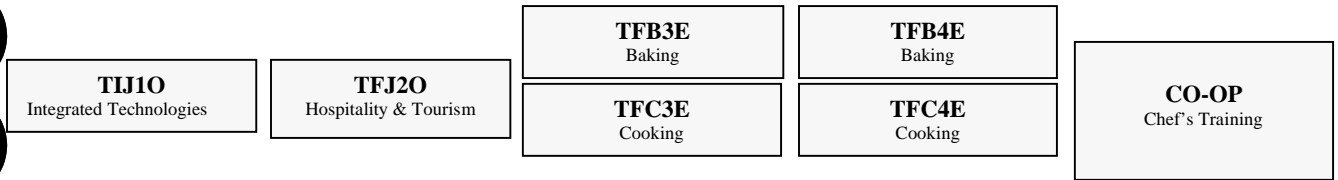
HHS4M Individuals and Families in a Diverse Society
University/College Preparation
(Through a RCDSB e-Learning course)
This course applies current theories and research from the disciplines of anthropology, psychology, and sociology to the study of individual development, family behaviour, intimate and parent-child relationships, and the ways in which families interact within the diverse Canadian society. Students will learn the interpersonal skills required to conduct and evaluate research about individuals and families.
Prerequisite: Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian world studies

HSB4M Challenge and Change in Society, Grade 12,
University/College Preparation
This course examines the theories and methodologies used in anthropology, psychology, and sociology to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour and their impact on society. Students will analyze cultural, social, and biological patterns in human societies, looking at the ways in which those patterns change over time. Students will also explore the ideas of classical and contemporary social theorists, and will apply those ideas to the analysis of contemporary trends.
Prerequisite: Any university, university/college or college preparation course in Social Sciences or English

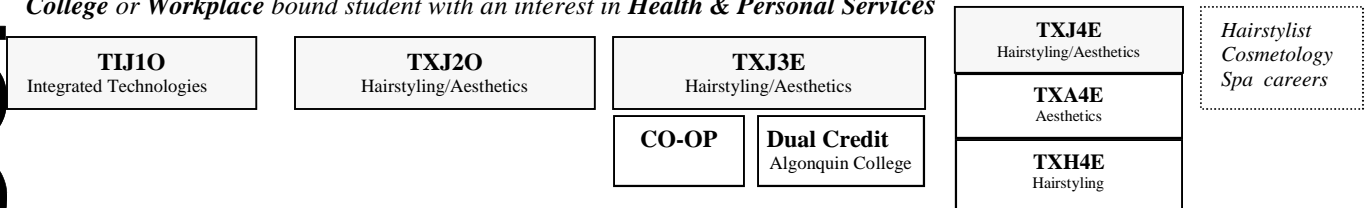
HZT4U Philosophy: Questions and Theories
University Preparation
This course addresses three (or more) of the main areas of philosophy: metaphysics, logic, epistemology, ethics, social & political philosophy, & aesthetics. Students will learn critical thinking skills, the main ideas expressed by philosophers from a variety of the world's traditions, how to develop & explain their own philosophical ideas, & how to apply those ideas to contemporary social issues & personal experiences. The course will also help students refine skills used in researching & investigating topics in philosophy.
Prerequisite: Any university or university/college course in Social Sciences or English

Possible Technology Pathways

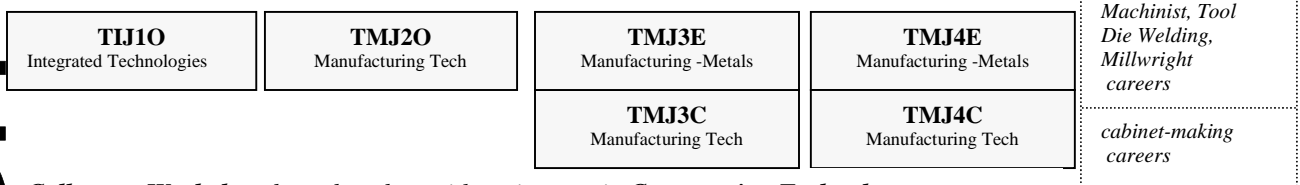
College or Workplace bound student with an interest in Hospitality and Tourism



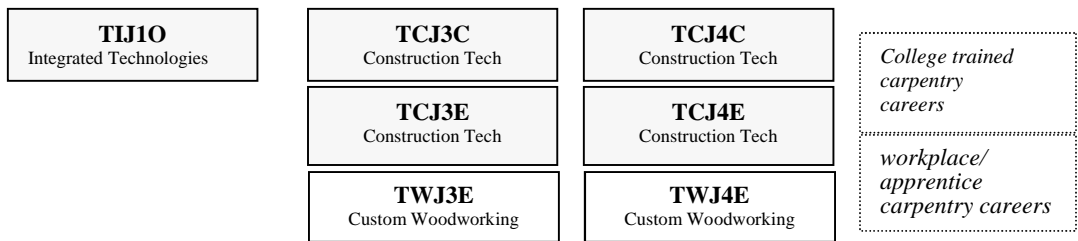
College or Workplace bound student with an interest in Health & Personal Services



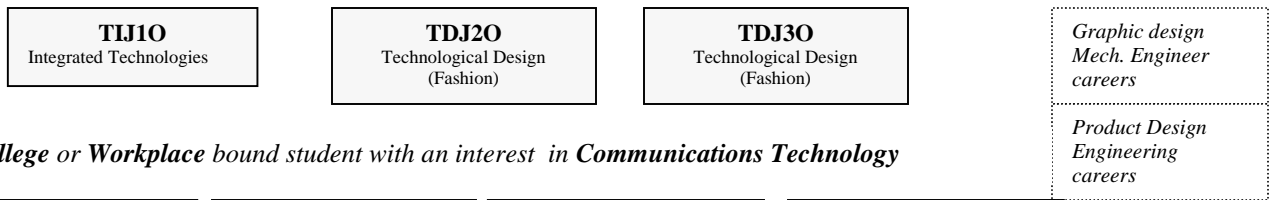
College or Workplace bound student with an interest in Manufacturing Technology



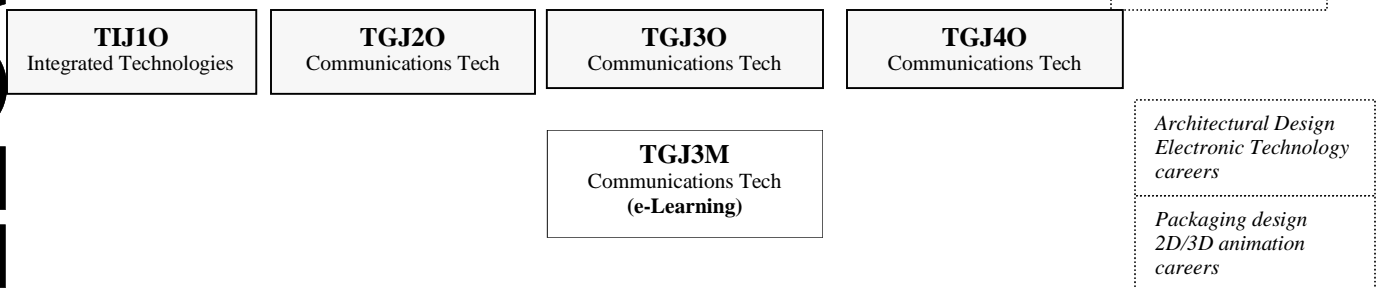
College or Workplace bound student with an interest in Construction Technology



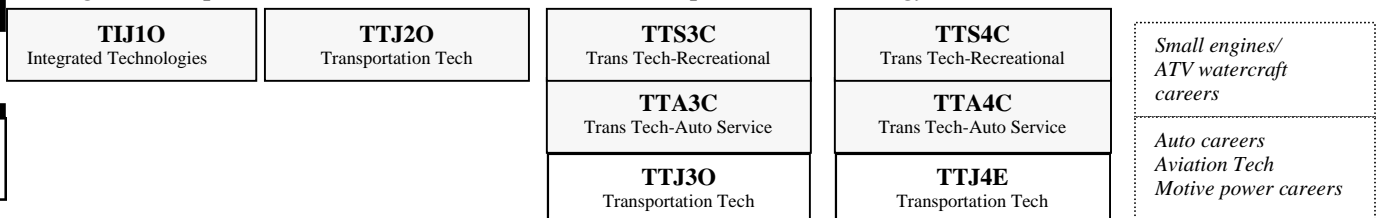
College or Workplace bound student with an interest in Technological Design



College or Workplace bound student with an interest in Communications Technology



College or Workplace bound student with an interest in Transportation Technology



Transportation Specialist High Skills Major

	Apprenticeship Training Pathway		College Pathway		University Pathway		Workplace Pathway	
	Grade 11	Grade 12	Grade 11	Grade 12	Grade 11	Grade 12	Grade 11	Grade 12
Major credits	TCJ3C	TCJ4C	TCJ3C	TCJ4C	TCJ3C	TCJ4C	TCJ3C	TCJ4C
2 Required Each Year	TCJ3E	TCJ4E	TCJ3E	TCJ4E	TCJ3E	TCJ4E	TCJ3E	TCJ4E
	TMJ3C	TMJ4C	TMJ3C	TMJ4C	TMJ3C	TMJ4C	TMJ3C	TMJ4C
	TMJ3E	TMJ4E	TMJ3E	TMJ4E	TMJ3E	TMJ4E	TMJ3E	TMJ4E
	TTA3C	TTA4A	TTA3C	TTA4A	TTA3C	TTA4A	TTA3C	TTA4A
	TTS3C	TTS4C	TTS3C	TTS4C	TTS3C	TTS4C	TTS3C	TTS4C
	English credit(s)	ENG3C 1	ENG4C 1	ENG3C 1	ENG4C 1	ENG3U 1	ENG4U 1	ENG3E 1
Math credits	MBF3C 1	MAP4C 1	MBF3C 1	MAP4C 1	MCR3U 1	MHF4U 1	MEL3E 1	MEL4E 1
Science or Business Studies 1 only	SPH4C1		BAF3M1 SPH4C1		BAF3M1 SPH3U1 SPH4U1		SVN3E1	
Co-op credits	2 COOP TIED TO MAJOR CREDIT		2 COOP TIED TO MAJOR CREDIT		2 COOP TIED TO MAJOR CREDIT		2 COOP TIED TO MAJOR CREDIT	

Hospitality and Tourism Specialist High Skills Major

Categories of Required Credits	Apprenticeship Training Destination		College Destination		University Destination		Entry Level Workplace Destination	
	Grade 11	Grade 12	Grade 11	Grade 12	Grade 11	Grade 12	Grade 11	Grade 12
Major Credits 2 required Per Year	TFB3E or TFC3E TFR3C1	TFB4E or TFC4E TFR4C1	TFB3E or TFC3E TFR3C1	TFB4E or TFC4E TFR4C1	TFB3E or TFC3E TFR3C1 TFR4C1	TFB4E or TFC4E HFA4M1	TFB3E TFC3C	TFB4E TFB4C
English	ENG3C1 or ENG 3E1	ENG4E1 or ENG4C1	ENG3C1	ENG4C1	ENG3U1	ENG4U1	ENG3E1	ENG4E1
Math	MBF3C1 or MEL3E1	MAP4C1	MBF3C1	MAP4C1	MCR3U1	MDM4U1	MEL3E1	MEL4E1
Science OR- Business Choose 1 only	SBI3C or SPH4C3 or SVN3M1	SCH4C1 or SPH4C1	BAF3M1 or SBI3C1 or SVN3M1	SCH4C1 or SPH4C1	BAF3M1 or SBI3U1 or SCH3U1 or SPH3U1 or SVN3M1	SBI4U1 or SCH4U1 or SPH4U1	SVN3E1	
CO-OP CREDITS	TIED TO MAJOR CREDIT	TIED TO MAJOR CREDIT	TIED TO MAJOR CREDIT	TIED TO MAJOR CREDIT	TIED TO MAJOR CREDIT	TIED TO MAJOR CREDIT	TIED TO MAJOR CREDIT	TIED TO MAJOR CREDIT

TECHNOLOGICAL STUDIES

TIJ10 Exploring Technology Open
Compulsory Course

This course enables students to further explore and develop the 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 of 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.

Communication Technology

TGJ20 Communications Technology Open

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

**TGJ30 Communications Technology:
Broadcast and Print Production** Open

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

**TGJ3M Communications Technology
University/College Preparation
(Through an RCDSB e-Learning course)**

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

**TGJ40 Communications Technology:
Digital Imagery and Web Design** Open

This course enables students to develop knowledge and skills in the areas of photography, digital imaging, animation, 3D modeling, and web design. Students will work both independently and as part of a production team to design and produce media products in a project-driven environment. Practical projects may include photo galleries, digital images, animations, 3D models, and websites. Students will also expand their awareness of environmental and societal issues related to communications technology and explore post-secondary education, training, and career opportunities.

Technological Design

TDJ20 Technological Design - Fashion Design Open

This course provides students with opportunities to apply a design process to meet a variety of technological challenges. Students will research projects, create designs, build models and/or prototypes, and assess products and/or processes using appropriate tools, techniques, and strategies. Student projects may include designing and constructing clothing and/or other fashion related products. Students will learn through practical experiences about the characteristics of fabrics, how to read patterns, operation of a sewing machine and basic skills related to clothing construction. The focus in this course will be Fashion Design. Students will develop an awareness of environmental and societal issues related to technological design, and learn about secondary and postsecondary education and training leading to careers in the field.

TDJ30 Technological Design and the Environment Open

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

Construction Technology

Construction Craft Worker Program—refer to appendix #1

**TCJ3C Construction Engineering Technology
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 explore career opportunities in the field.

Prerequisite: None but TCJ20 or TMJ20 recommended

TCJ3E Construction Technology Workplace Preparation

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

Prerequisite: None but TMJ20 or TCJ20 recommended

TECHNOLOGICAL STUDIES

Construction Technology (cont' d)

TWJ3E Custom Woodworking Workplace Preparation
This course enables students to develop knowledge and skills related to cabinet making and furniture making. Students will gain practical experience using a variety of the materials, tools, equipment, and joinery techniques associated with custom woodworking. Students will learn to create and interpret technical drawings and will plan, design, and fabricate projects. They will also develop an awareness of environmental and societal issues related to the woodworking industry, and explore apprenticeships, postsecondary training, and career opportunities in the field that may be pursued directly after graduation.

Prerequisite: None but TCJ20 or TMJ20 recommended

TCJ4C Construction Engineering Technology College
This course enables students to further develop knowledge and skills related to residential construction and to explore light commercial construction. Students will gain hands on experience using a variety of materials, processes, tools, and equipment and will learn more about building design and project planning. They will continue to create and interpret construction drawings and will extend their knowledge of construction terminology and of relevant building codes and regulations, as well as health and safety standards and practices. Students will also focus on environmental and societal issues related to construction engineering technology, and explore career opportunities in the field.

Prerequisite: Construction Engineering Technology, Grade 11, College Preparation

TCJ4E Construction Technology Workplace Preparation
This course enables students to further develop technical knowledge and skills related to residential construction and to explore light commercial construction. Students will continue to gain hands on experience using a variety of materials, processes, tools, and equipment; create and interpret construction drawings; and learn more about building design and project planning. They will expand their knowledge of terminology, codes and regulations, and health and safety standards related to residential and light commercial construction. Students will also expand their awareness of environmental and societal issues related to construction technology and explore entrepreneurship and career opportunities in the industry that may be pursued directly after graduation.

Prerequisite: Construction Technology Grade 11, Workplace Preparation

TWJ4E Custom Woodworking Workplace Preparation
This course enables students to further develop knowledge and skills related to the planning, design, and construction of cabinets and furniture for residential and/or commercial projects. Students will gain further experience in the safe use of common woodworking materials, tools, equipment, finishes, and hardware, and will learn about the entrepreneurial skills needed to establish and operate a custom woodworking business. Students will also expand their awareness of health and safety issues and environmental and societal issues related to woodworking, and will explore career opportunities that may be pursued directly after graduation.

Prerequisite: Custom Woodworking, Grade 11, Workplace Preparation

Manufacturing Technology

TMJ20 Manufacturing Technology Open
This course introduces students to the manufacturing industry, by giving them an opportunity to design and fabricate projects using a variety of processes, tools, and equipment. Students will learn about technical drawings; properties and preparation of materials, including wood, and manufacturing techniques. Student projects may include a robotic challenge, a design challenge, or a fabrication project involving processes such as machining, welding, vacuum forming, or injection moulding. Students will develop an awareness of environmental and societal issues, related to manufacturing and will learn about secondary and postsecondary pathways leading to careers in the industry.

TMJ3C Manufacturing Technology College Preparation
This course enables students to develop knowledge and skills through hands-on, project-based learning. Students will acquire design, fabrication and problem-solving skills while using tools and equipment such as lathes, mills, welders, computer-aided machines, robots, and control systems. Students may have opportunities to obtain industry-standard certification and training. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about pathways leading to careers in the industry.

Prerequisite: None but TMJ20 recommended

TMJ3E Manufacturing Technology Workplace Preparation
This hands-on, project-based course is designed for students planning to enter an occupation or apprenticeship in manufacturing directly after graduation. Students will work on a variety of manufacturing projects, developing knowledge and skills in design, fabrication, and problem solving and using tools and equipment such as engine lathes, milling machines, and welding machines. In addition, students may have the opportunity to acquire industry-standard certification and training. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about secondary school pathways that lead to careers in the industry.

Prerequisite: None but TMJ20 recommended

TMJ4C Manufacturing Technology College Preparation
This course enables students to further develop knowledge and skills related to machining, welding, print reading, computer numerical control (CNC), robotics, and design. Students will develop proficiency in using mechanical, pneumatic, electronic, and computer control systems in a project-based learning environment and may have opportunities to obtain industry-standard training and certification. Students will expand their awareness of environmental and societal issues and career opportunities in the manufacturing industry.

Prerequisite: Manufacturing Technology Grade 11
College Preparation

TMJ4E Manufacturing Technology Workplace Preparation
This project-driven, hands-on course builds on students' experiences in manufacturing technology. Students will further develop knowledge and skills related to the use of engine lathes, milling machines, welding machines, and other related tools and equipment as they design and fabricate solutions to a variety of technological challenges in manufacturing. Students may have opportunities to acquire industry-standard training and certification. Students will expand their awareness of environmental and societal issues and of career opportunities in the manufacturing industry.

Prerequisite: Manufacturing Technology Grade 11
Workplace Preparation

**TECHNOLOGICAL STUDIES
(cont' d)**

Transportation Technology

TTJ20 Transportation Technology Open
This course introduces students to the service and maintenance of vehicles, aircraft, and/or watercraft. Students will develop knowledge and skills related to the construction and operation of vehicle/craft systems and learn maintenance and repair techniques. Student projects may include the construction of a self-propelled vehicle or craft, engine service, tire/wheel service, electrical/battery service, and proper body care. Students will develop an awareness of related environmental and societal issues and will explore secondary and post secondary pathways leading to careers in the transportation industry.

**TTA3C Transportation Technology College Preparation
Auto Service**

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. The focus will be on automotive service.

**TTS3C Transportation Technology College Preparation
Small Engine & Recreational Equipment**

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. The focus will be on recreational transportation.

TTJ30 Transportation Technology: Vehicle Ownership Open
This general interest course enables students to become familiar with the options and features of various vehicles, issues of registration, and the legal requirements affecting vehicle owners. Students will also learn about vehicle financing and insurance, vehicle maintenance, emergency procedures, and the responsibilities of being a vehicle owner. Students will develop an awareness of environmental and societal issues related to vehicle ownership and use, and will explore career opportunities in the transportation industry.

**TTJ4E Transportation Technology Workplace Preparation
Vehicle Maintenance**

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.

**TTS4C Transportation Technology College Preparation
Small Engine & Recreational Equipment**

This course enables students to further develop technical knowledge and skills as they study, test, service, and repair engine management systems; power trains; steering/control, suspension, brake, and body systems on vehicles, aircraft, and/or watercraft; and/or small-engine products. Students will refine communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will expand their awareness of environmental and societal issues related to transportation and their knowledge of apprenticeship and college programs leading to careers in the transportation industry. Focus will be on recreational transportation.
Prerequisite: Transportation Technology (Recreational)
Grade 11

**TTA4C Transportation Technology College Preparation
Auto Service**

This course enables students to further develop technical knowledge and skills as they study, test, service, and repair engine management systems; power trains; steering/control, suspension, brake, and body systems on vehicles, aircraft, and/or watercraft; and/or small-engine products. Students will refine communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will expand their awareness of environmental and societal issues related to transportation and their knowledge of apprenticeship and college programs leading to careers in the transportation industry. Focus will be on automotive transportation.
Prerequisite: Transportation Technology (Recreational)
Grade 11

Hospitality and Tourism

TFJ20 Hospitality and Tourism Technology Open
This course provides students with opportunities to explore different areas of hospitality and tourism, as reflected in the various sectors of the tourism industry, with an emphasis on food service. Students will study culinary techniques of food handling and preparation, health and safety standards, the use of tools and equipment, the origins of foods, and event planning, and will learn about tourism attractions across Ontario. Students will develop an awareness of related environmental and societal issues and will explore secondary and postsecondary pathways leading to careers in the tourism industry.

**TFB3E Hospitality and Tourism Workplace Preparation
Baking**

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

**TFC3E Hospitality and Tourism Workplace Preparation
Cooking**

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

**TECHNOLOGICAL STUDIES
(cont' d)**

Hospitality and Tourism (cont' d)

TFB4E1 Hospitality and Tourism Workplace Preparation
Baking

This course enables students to further develop knowledge and skills related to the food and beverage services sector of the tourism industry. Students will demonstrate proficiency in using food preparation and presentation tools and equipment; plan nutritious menus, create recipes, and prepare and present finished food products; develop customer service skills; and explore event and activity planning. Students will expand their awareness of health and safety practices, environmental and societal issues, and career opportunities in the food and beverage services sector. An emphasis will be placed on baking.

Prerequisite: Hospitality & Tourism Grade 11 Workplace Preparation

TFB4E2 Hospitality and Tourism Workplace Preparation
Baking

This course continues to build on the knowledge and skills acquired in TFB4E1 with an emphasis on management.

Prerequisite: TFB4E1

TFC4E1 Hospitality and Tourism Workplace Preparation
Cooking

This course enables students to further develop knowledge and skills related to the food and beverage services sector of the tourism industry. Students will demonstrate proficiency in using food preparation and presentation tools and equipment; plan nutritious menus, create recipes, and prepare and present finished food products; develop customer service skills; and explore event and activity planning. Students will expand their awareness of health and safety practices, environmental and societal issues, and career opportunities in the food and beverage services sector. An emphasis will be placed on baking.

Prerequisite: Hospitality & Tourism Grade 11 Workplace Preparation

TFC4E2 Hospitality and Tourism Workplace Preparation
Cooking

This course continues to build on the knowledge and skills acquired in TFC4E1 with an emphasis on management.

Prerequisite: TFC4E1

**Health & Personal Services
Technology**

TXJ20 Hairstyling and Aesthetics Open

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

TXJ3E Hairstyling and Aesthetics Workplace Preparation

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

TXJ4E1 Hairstyling and Aesthetics Workplace Preparation

This course enables students to develop increased proficiency in a wide range of hairstyling and aesthetics services. Working in a salon/spa team environment, students strengthen their fundamental cosmetology skills and develop an understanding of common business practices and strategies in the salon/spa industry. Students expand their understanding of environmental and societal issues and their knowledge of postsecondary destinations in the hairstyling and aesthetics industry.

Prerequisite: Hairstyling and Aesthetics Grade 11 Workplace Preparation

TXJ4E2 Hairstyling and Aesthetics Workplace Preparation

This course continues to build on the knowledge and skills acquired in TXJ4E1 with a focus on advanced skill building and customer service skills.

Prerequisite: TXJ4E1