

Course Selection Guide 2020 – 2021

J.L. Isley High School





2020-2021 COURSE SELECTION BOOKLET

TABLE OF CONTENTS

	Page #
1. Introduction/General Information	2 – 19
2. Arts Education	20
3. Business Education	24
4. English Language Arts	26
5. Family Studies, Personal Development and Career Exploration	29
6. French Second Language	33
7. Mathematics	34
8. Physical Education	42
9. Science	45
10. Social Studies	49
11. Technology Related Education	52

Introduction

The information contained in this booklet has been prepared to help students choose the programs of studies best suited to their interests, abilities and future goals. Registration usually begins in February of each year. Guidance counsellors will initiate the process by meeting with students in a large group format, followed by the opportunity for individual sessions. Counsellors will receive recommendations from classroom teachers for each student in Math and English, and these recommendations should form the basis of course selections. In requesting remaining courses, it is important that students refer to the course descriptions in this book so that they make informed requests. Students will request courses in PowerSchool and parents are encouraged to review and discuss these requests with their child. Parental input is a very important component in this process and we encourage you to contact the guidance counsellor if you have any questions or concerns. It is expected that the course request process for incoming grade 9's will be completed by the end of March and for Grade 10's and 11's by the end of April. The grade 9 parent meeting will take place at J. L. Ilsley on February 20th at 7 pm.

Additional Notes

- In June, if a student receives a failing mark in a compulsory course, he/she will be automatically re-registered for that course for the following year. If the student then attends summer school, and passes, the course requests will be modified accordingly.
- Schools are staffed based on the course requests made by students in the spring of each year. **Therefore we cannot make course changes for students in September, unless a student has a scheduling conflict or has a change in post-secondary plans.**
- Due to low enrollment or over-subscription, certain courses may be adjusted on students course requests. In such situations the Guidance counsellor will choose from the student's alternate course requests.

Contact Information for Guidance Counsellors

<i>For current J. L. Ilsley students</i>		
Surnames A-F:	Kelly Nickerson	479-4612 ext. 5701005 knickerson@hrce.ca
Surnames G-Z:	Peggy Furlong	479-4612 ext. 5701007 pfurlong@hrce.ca
Cunard Junior High:	Eva Doell	479-4421 edoell@hrce.ca
Elizabeth Sutherland:	Amy Holland	479-4427 Amy.Holland@hrce.ca
Herring Cove Jr. High:	Carolyn Landry	479-4214 CLandry@hrce.ca
Rockingstone Jr. High:	Eva Doell	479-4227 edoell@hrce.ca

Credit Types

Advanced Placement

These courses are recognized by universities as being at a first year university level and students may receive credit or advanced standing for high achievement in these courses. Please see page 5 for further details.

Advanced

Advanced courses are designed to meet the needs of students who have demonstrated an exceptional degree of academic ability or achievement and are planning post-secondary study at university or community college.

Academic

Academic courses are designed for students who wish to enter college, university or other post-secondary institutions.

Open

Although none of the open courses is designed to meet the specific entrance requirement of any post-secondary institution, individual courses may meet entrance requirements of some institutions.

Graduation

Graduation courses are designed for students who wish to earn a graduation diploma with a view to proceeding to employment or some selected area of post-secondary study.

Semestering

In a semestered school the year is divided into two equal semesters. The semesters run as follows: Semester 1 September to January; Semester 2 February to the end of June. During each semester a student may take up to four courses. Each semester ends with a final examination period.

In a semestered school a student has each course every day. Every effort will be made to balance the load of subjects between semesters. Consult with your Counsellor if you have any timetabling concerns.

Grade 12 students apply to post-secondary institutions at the end of the first semester. Please note that some Grade 11 marks are used by universities in conjunction with the Grade 12 marks to determine an admission average and award scholarships.

High School Awards

An academic awards ceremony is held to recognize the achievement of grade 10 and 11 students from the previous year. Certificates are awarded for Honours (80%-85.9%), High Honours (85%-89.9%), Principal's List (90% or above) and subject prizes. In addition, a plaque with student names is placed in the school to acknowledge award recipients.

The following criteria will be used when calculating averages for student recognition:

- ✓ Averages will be calculated using all the courses the student was enrolled using a straight average (there will be no mark below restrictions).
- ✓ There will be no minimum number of courses enrolled in to qualify for the mark distinctions.

Challenge for Credit and Independent Study

The challenge for credit process allows a school to recognize that a student has already acquired the skills, knowledge and attitudes that an existing course seeks to develop. Challenge for credit may occur in fine arts, languages, mathematics and physical education. In order for a challenge to be successful it is expected that students' prior experiences have significant educational value and are directly aligned with the learning outcomes of the course being challenged.

Independent study credits help promote individualized programming and are not intended to replicate any existing course in the public school program. Please see your guidance counsellor for further details.

Personal Development Credits

What are Personal Development Credits?

A credit is awarded when a person achieves all of the requirements in an area of training or learning. The Department of Education and Early Childhood Development's Personal Development Credit was designed to recognize the achievements of students who successfully complete courses or meet all of the assessment standards of organizations that are external to the high school system.

Under the policy, personal development credits can be awarded in three areas:

1. Arts
2. Languages
3. Leadership

Credits will be awarded for approved courses or programs provided by a group or organization that is recognized by the Department of Education and Early Childhood Development as an approved Course or Program Provider. In recognizing an organization, the Department of Education and Early Childhood Development ensures that the courses or programs offered are high quality, support provincial *Principles of Learning*, do not duplicate courses that are part of the public school program for Nova Scotia high schools, and allow students to work toward achieving Nova Scotia's *Essential Graduation Learnings* (EGLs). Students in grade 10, 11, or 12 may have a personal development credit recognized on their high school transcript when they are able to provide evidence of successfully completing a recognized course or program to a guidance counsellor or administrator at their school. The policy also allows students who have earned the credential required for a personal development credit while attending junior high school to apply to have the credit recognized as a grade 10, 11, or 12 elective credit once they enter high school. Depending on the curriculum or assessment criteria (i.e., what students will know and be able to do when they have earned a credential), the Department will determine whether a personal development credit qualifies as a grade 10, 11, or 12 credit. Based on the time involved in earning the credit, the Department will also decide if the credit qualifies as a half or full credit.

The Different Types of Personal Development Credits

The Department of Education and Early Childhood Development's policy recognizes personal development credits in three learning areas—arts, leadership, and languages. In all cases, approved credits are different from courses taught in Nova Scotia's high schools. Only credits approved by the Department of Education and Early Childhood Development will be recognized, and students are encouraged to check the Approved Provider and Course List on the Personal Development Credit website [<https://pdc.ednet.ns.ca>] before submitting a personal development credit Student Notification form to their guidance counsellor or administrator at their school.

1. Arts

If you achieved a high level of skill in community-based music, dance, or visual arts programs, you may be eligible to have a personal development credit recognized on your high school transcript. There are two types of credits that apply to the arts:

- a. Some students gain a high level of skills through courses and private tutoring and then complete a final exam through an organization such as the Royal Conservatory of Music to gain a final credit.
- b. Students can also meet all of the requirements of a recognised community-based arts course or program and receive a credit in recognition of their achievements if the course or program

2. Languages

If you can demonstrate strong speaking and writing skills in a language other than English, French, Gaelic, German, Latin, Mi'kmaq, or Spanish, you may be eligible to have a personal development credit in language recognized on your high school transcript.

If you have learned a new language in a course or program approved by the Department of Education and Early Childhood Development and have received a certificate verifying that you have achieved an acceptable level of oral and written skills in this language, you can have this credential recognized as a personal development credit on your high school transcript. To see whether the language school and the course you have completed have been approved by the Department of Education and Early Childhood Development and whether it qualifies for a half or full credit for grade 10, 11, or 12, follow this link [<https://pdc.ednet.ns.ca>] to view the Approved Provider and Course List or speak with a guidance counsellor at your school.

3. Leadership

There are excellent opportunities for students to develop leadership skills in programs across the province. These programs range from community leadership, entrepreneurship, sport leadership, to environmental and agricultural stewardship, to name just a few. At the centre of leadership courses or programs approved by the Department of Education is a commitment to personal and community development in high quality learning experiences that capture students' interests and aspirations.

If you have met all of the requirements of an approved leadership course and received the required credential in recognition of your achievement, you may be eligible to have it recognized as a personal development credit on your high school transcript. To see if your leadership credential has been approved by the Department of Education and Early Childhood Development and whether it qualifies for a half or full credit for grade 10, 11, or 12 follow this link [<https://pdc.ednet.ns.ca>] to view the Approved Provider and Course List.

Questions and Answers

Q. What is the purpose of the Personal Development Credit?

A. One of the province's goals for education in the *Kids and Learning First* plan is to prepare young people for good jobs and citizenship in their communities. The Personal Development Credit provides another way to encourage students to gain valuable life skills and experiences beyond the classroom, strengthening their connections with their communities.

Q. How does the credit work?

A. Students who successfully complete a course or program approved by the Department of Education and Early Childhood Development will earn a full or half-credit to be included on their transcript. This Personal Development Credit may count as one of the five elective credits that students require for graduation. The student can also have additional Personal Development Credits recorded on his/her transcript as extra credits beyond the thirteen compulsory and five elective credits required for graduation.

Q. Which programs are eligible?

A. In 2015–2016 and thereafter, students can earn the credit for successfully completing approved programs from the list of approved course providers.

Q. Can students earn more than one credit for participating in different programs?

A: They can earn only one elective credit towards the 18 credits minimum required for graduation. It can be a grade 10, 11, or 12 credit, depending on the designation that the department determines. However, they can have more than one credit appear on their transcript beyond the 18 required.

Q. Can a student get credit for taking part in an approved program before he/she reaches high school?

A. The credit can be added to a student's transcript any time after the student begins high school, according to school procedures, but not after June 1 of the year the student graduates.

Q. How are students marked in this course?

A. For the Personal Development Credit, students receive a pass on their transcript rather than a numerical grade. They won't see a mark appear on their report card, but the credit will be recognized on their transcript. 7

Q. How do students take part in the credit? Do they have to submit any paperwork at school before they enrol in a program like Cadets?

A. Students do not have to make arrangements with their school before participating in a program. To receive a credit, students submit their documented proof of successful completion of the approved course/program to their guidance counsellor.

Q. Do students have to pay to take part in these credits?

A. One of the requirements for services providers is that they provide options, such as bursaries, to help eliminate any financial barriers for students. But any other costs, such as assessment fees or travel, are the responsibility of the student and his or her parents/guardians. Any financial challenges should be discussed with the service provider.

Q. Where can I learn more about the programs that are approved?

A: More information about the credit is available at <https://pdc.ednet.ns.ca>. Eligible programs will be listed on the site once they are approved.

Q. If I take part in a program that I think should qualify but isn't on the approved list, is there anything I can do?

A. Students cannot earn a Personal Development Credit for a course that isn't on the Department of Education and Early Childhood Development's approved providers list. The Department will review applications from organizations every two years, and you can encourage the organization where you participated to apply to become an approved provider. The next application cycle will be in 2016–17 with approved program providers added for the 2017–18 school year.

Course Load Requirements

Students are eligible to register for a total of 24 courses over a three year period. The following are the minimum course load requirements.

- Grade 10 students must register for 8 courses per year, 4 in each semester.
- Grade 11 students must register for 7 courses per year, 3 in one semester and 4 in the other.
- Grade 12 student must enroll in a minimum of 6 courses per year, 3 each semester.
- Returning graduates will be accepted provided there is room. Course selection will be accommodated on course availability in September.

Course Requests

- All courses offered are conditional upon adequate enrollment. It may also be necessary to limit the number of students in a course because of space, safety and other factors.
- Course changes in September or throughout the year will be based on academic need and assessed on an individual basis only in exceptional circumstances. **Course requests in the spring for September should be considered final.** All students are expected to follow their second semester timetables for courses assigned in September. Repeating failed courses in second semester should not be expected.
- It is the responsibility of the student to change his or her course level, if required, due to failure of a subject at the end of the year. This should be done in June after picking up final marks and before leaving school.
- Before registering for courses be sure you have the required approval and/or the recommended prerequisites.
- Students and parents are encouraged to use the services of School Counsellors, Department Heads, Subject Teachers or Administration for information on course requests, career and educational opportunities, study skills, and other areas of concern. Refer to the Nova Scotia Graduation Requirements section on page 6.
- Investigate the entrance requirements of your chosen post-secondary institution: Community College, University, etc., so that you request the required subjects. **Please note that graduation from high school does not necessarily qualify a student to enter university or other institutions that offer professional training. Specified prerequisites, both in courses and in standards (marks), in those courses may be required.**

Resource Support/Learning Center

Resource staff at J. L. Ilsley High School are aware of the educational implications of various cognitive, sensory, physical, social and emotional factors that affect students. They offer a service that provides assistance with course work and assignments as part of a student's daily schedule.

The Resource classes and Learning Center also:

- Provide a "base" and advocacy for students with Individual Program Plans or students requiring course adaptations.
- Assist teachers in providing technology and materials to support Individual Program Plans and course adaptations for individual students.
- Liaise with all school departments to help ensure that student needs are met in the classroom.
- Participate in the ongoing communication process with parents and administration regarding achievement and attendance.

Learning Supports

EAL PLACEMENT AND LITERACY ASSESSMENT

Grade 9 EAL students transitioning from J. L. Ilsley's feeder schools receive guidance on their course options in relation to their current literacy levels. EAL students are encouraged to pursue courses in high school which both strengthen their literacy competency and help them pursue their academic goals.

EAL students who are newcomers to our school area, or who arrive throughout the school year, write a literacy assessment test to determine their English language competency levels.

Typically, students working at a Literacy 1 level require the greatest amount of language assistance while students working at a Literacy 5 level require minimal language support. However, all EAL students are encouraged to seek support from their teachers, guidance, and support staff such as our YMCA support.

EAL ACADEMIC LANGUAGE 10

For students at any literacy level, this course familiarizes students with the language (including concepts, structures, terms, and practises) used in all their courses, provides hands-on assistance, and helps students make valuable connections.

Advanced Placement (AP)

AP courses offer grade 12 students the opportunity to pursue university level studies while in high school. These courses provide students with a challenging curriculum, and prepare them well for university studies. The AP program has internationally recognized standards and therefore creates opportunities for students to be accepted into highly competitive programs. Based on their performance in rigorous AP examinations held worldwide on set dates, students can earn credits or advanced placement at most universities in Canada and the US. In our ongoing effort to provide enrichment opportunities for students, we offer Advanced Placement (AP) courses in AP English 12, AP Physics 12, AP Chemistry 12, AP Calculus 12 and AP Biology 12. Students who are considering advanced placement in their grade 12 year must enroll in Pre-AP courses in grade 10 and 11. For more information please check the website at www.apcentral.collegeboard.com or the Canadian Website: www.ap.ca

What are the benefits of AP?

There are many benefits to taking AP.

- **Enrichment** – challenge yourself with rigorous academic courses.
- **Flexibility** – choose courses based on your academic strengths and interests.
- **Preparation** – experience university-level expectations and content to help you prepare for university studies.
- **University Recognition** – earn credit, advanced placement, or both, based on your performance on standardized, demanding AP examinations.

Who should enroll in AP courses?

- Students who have a demonstrated record of achievement and a desire to attend university.
- Students who have a willingness to meet the challenges of a rigorous academic course.

Consider the AP challenge if you're ready to explore a subject in greater depth, learn to make connections with larger concepts, develop analytical reasoning skills and form disciplined study habits that will contribute to your success at university.

Requirements

Nova Scotia Graduation Requirements

18 credits are required to graduate

- 13 of these are compulsory
 - 3 English Language Arts (one at each grade level)
 - 3 Mathematics (from three different grade levels)
 - 2 Sciences (a “first science” credit and 1 other – see course descriptions)
 - 1 Canadian History course (Canadian History 11, African Canadian Studies 11 or Mi’kmaq Studies 11)
 - 1 Global Studies (Global Geography 12, or Global History 12)
 - 1 Physical Education (from Phys Ed 10, Physically Active Living 11, Phys Ed 11, Yoga 11 or Phys Ed Leadership 12)
 - 1 Fine Arts (Visual Arts, Drama, Music)
 - 1 other credits from Technology, Mathematics or Science
- No more than 7 of the 18 credits may be from courses coded as Grade 10 and at least 5 must be from courses coded as Grade 12.
- Only one credit will be given for a course in the same subject at the same grade level, although both will show on the student transcript. For example, if a student completes English Communications 12 and English 12, it will only count as one credit toward the 18 credits required for graduation.

Post-Secondary Admission Requirements

Listed below are the grade 12 courses required for several post-secondary programs. It is important to check the specifics for each institution as they vary, especially outside Nova Scotia.

University Entrance Requirements

- **Bachelor of Arts**
English + 4 other academic courses
- **Bachelor of Science**
English, Pre-Calculus Math, 2 Sciences + 1 other academic course
- **Bachelor of Commerce**
English, Mathematics (in some cases Pre-Calculus) + 3 other academic courses
- **Bachelor of Engineering**
English, Pre-Calculus Math, Chemistry, Physics + 1 other academic course
Calculus is required for Science and Engineering in many universities outside of Atlantic Canada
- **Bachelor of Computer Science**
English, Pre-Calculus Math + 3 other academic courses
(some institutions require grade 12 science courses)
- **Bachelor of Nursing**
English, Math (academic) Chemistry, Biology + 1 other academic course

Community College Entrance Requirements Grade 12 or equivalent (some programs have specific subject requirements, particularly in mathematics and science). Please check admission requirements at Nova Scotia Community College (nsc.ca). **Grade 11 students are encouraged to apply to NSCC to increase their chances of admission in their grade 12 year.**

Credit Check

The chart below will help you determine whether you are on the right path towards graduation. Compare it with your “Three-Year-Plan” to ensure that you will meet the requirements to graduate. On the space provided, write the name of the course that satisfies the requirement.

English 10	
English 11	
English 12	
Mathematics (Grade 10 level)	
Mathematics (Grade 11 level)	
Mathematics (Grade 12 level)	
First Science	
(Science 10, Bio 11, Physics 11, Chem 11)	
Second Science	
One Social Studies-Canadian Content	
One Global Studies 12	
One Physical Education credit	
One Fine Arts	
(Visual Arts, Music, Drama)	
First Technology	
(Science, Math, Technology)	
5 Grade 12 Credits	

Only seven Grade 10 credits may be used towards the 18 requirements. Extra grade 10 credits should be listed below the dotted line.

Students must have a minimum of five grade 12 credits to graduate. Most students have more than five grade 12 credits, especially those going on to university.

Minimum Total is 18 Credits

Credits above and beyond 18

Plan for Success – 3 Year Course Planning

We encourage you to complete the chart below tentatively listing all the courses you plan to take in high school. Choose 2 alternates as well. Make sure that you include prerequisites for future courses. Please check your graduation requirements and those courses required for any post-secondary programs that may interest you before you finalize your selections with your counsellor.

Grade 10 – Choose 8 courses	Grade 11 – Choose 7 courses	Grade 12 – Choose 6 courses
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	
8		
Alternate:	Alternate:	Alternate:
Alternate:	Alternate:	Alternate:

Student Name: _____

Expected Graduation Year: _____

Possible program(s) of study after high school:

What institutions are you considering?

Necessary (pre-requisite) high school courses for post-secondary program:

French Immersion Certificate

Students who have successfully completed grade 9 in a French Immersion program are eligible to continue their French Immersion studies in high school.

A French Immersion certificate from N.S Dept. of Education will be awarded to students who pass 9 academic credits in subjects taught in French (including French language arts in Grade 10, 11, and 12). Students who wish to obtain a French Immersion Certificate must take 5 French Immersion courses in Grade 10. Students are required to take a minimum of two French Immersion courses per year.

The program of studies is outlined below:

Grade 10	Grade 11	Grade 12
Art Dramatique 10 Imm Français Immersion 10 Histoire Ancienne 10 Imm Sciences 10 Imm Histoire du Canada 11 Imm	Biologie 11 Imm Français Immersion 11	Français Immersion 12 Histoire Planetaire 12 Imm

Why Study French at High School?

- By continuing in French Immersion in high school students are able to maintain and extend their French skills. The French Immersion program is designed to maximize the time spent using French.
- Research has shown that students who learn another language develop keen analytic, restructuring, and divergent thinking skills.
- As the job market and the workplace change due to our global economy, it has become even more important to have a thorough knowledge of at least one other language.
- Having proficiency in a second language gives students an advantage in the competitive job market, and more opportunity for upward mobility. Research has shown that workers who speak both official languages earn more than those who speak only English or French.
- We live in a country that is officially bilingual and the ability to converse in both official languages is an asset. It enhances one's ability to participate fully in Canadian society.

**Sample Course Path:
French Immersion Students Interested in Post-Secondary Bachelor of Science Programs.**

	Grade 10	Grade 11	Grade 12
Semester 1	ENGLISH 10 CREDIT	ENGLISH 11/11AP	ENGLISH 12/12AP
	SCIENCES 10 IMM	BIOLOGIE 11 IMM	HISTOIRE PLANETAIRE 12 IMM
	MATHEMATICS	MATHEMATICS 11	PRE-CALCULUS 12
	HISTOIRE ANCIENNE 10 IMM	CHEMISTRY 11	PHYSICS 12/12AP
Semester 2	MATHEMATICS	PHYSICS 11	PHYS ED LEADERSHIP 12
	HISTOIRE DU CANADA 11 IMM	BIOLOGY 12AP	CHEMISTRY 12/12AP
	ART DRAMATIQUE	PRE-CALCULUS 11	CALCULUS 12
	FRANCAIS IMMERSION 10	FRANCAIS IMMERSION 11	FRANCAIS IMMERSION 12

*Universities vary in terms of pre-requisites. Students must check the requirements of any prospective schools of interest.

02: Options and Opportunities

O2: Options and Opportunities provides a comprehensive educational program that bridges high school to post-secondary education, work and /or youth apprenticeships for each student. The program is helps students make connections between what they are learning in school and post-secondary programs and/or work. High school students who participate in the program get experience in a career academy and increased opportunities for community-based learning such as cooperative education credits.

Students who graduate from O2 will have fulfilled all graduation requirements and earned a high school diploma. In addition, they will have also graduated with a greater understanding of their skills, knowledge and strengths, and a career plan.

O2 builds on initiatives introduced through the Youth Pathways and Transitions strategy. O2 program components include Community-Based Learning Partnerships, Skills for the Workplace, Career Academies, Integrated Career Education and Planning, Instructional Teaming, Expanded Course Options, Connecting with Families, and Head Start in the Trades.

O2 is a full high school program (10-12) and is available to students entering grade 10 who need additional help with career and educational planning. Students must apply and participate, along with their families, in an admissions process.

Sample Course Path – Options and Opportunities

		Grade 10	Grade 11	Grade 12
Semester 1		CAREER DEVELOPMENT 10	ENGLISH 11	ENGLISH 12
		SCIENCE 10 O2	CAREER DEV 11/ WORKPLACE 11 O2	GLOBAL STUDIES 12
		MATHEMATICS 10	CO-OP 11 O2	MATHEMATICS 12
		PHYSICAL EDUCATION CREDIT	SOCIAL STUDIES 11	G.12 TECHNOLOGY CREDIT OR ELECTIVE
Semester 2		ENGLISH 10 O2	CO-OP 12 O2	CO-OP 12
		COMMUNITY BASED LEARNING 10 O2	MATHEMATICS 11	CO-OP 12
		FINE ARTS 10 CREDIT	GRADE 11 SCIENCE CREDIT	CO-OP 12
		TECH ELECTIVE OR MATHEMATICS 10	ELECTIVE	CO-OP 12

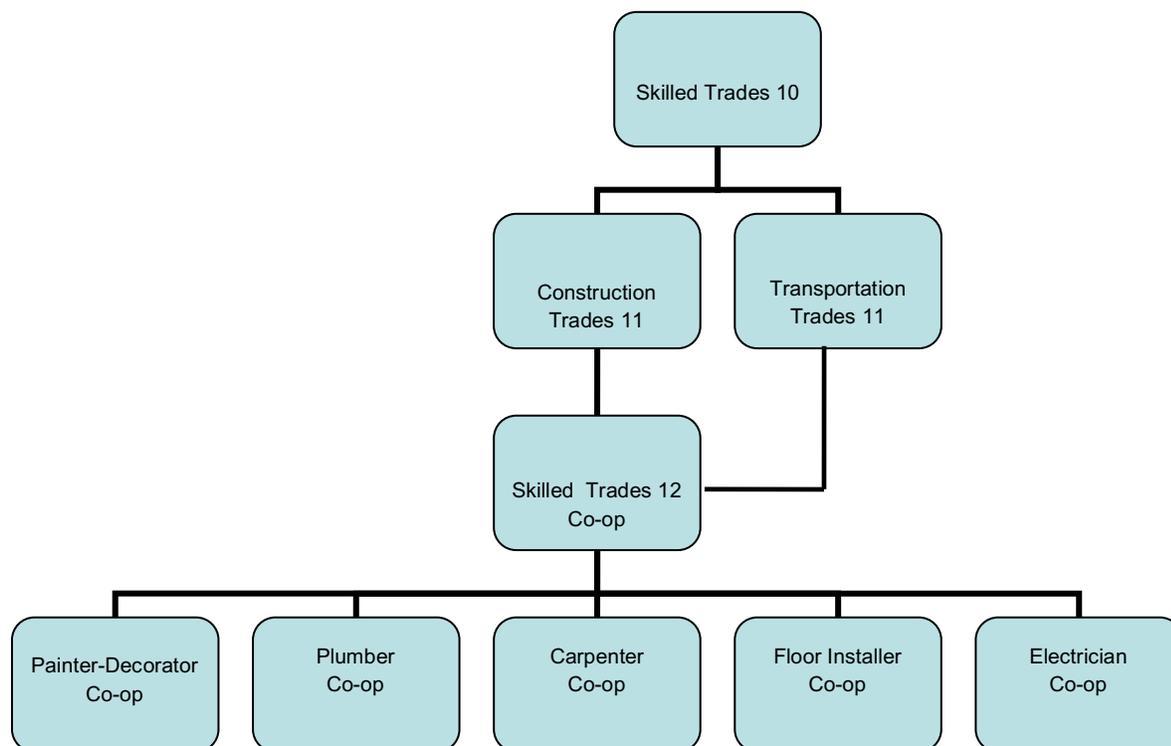
Skilled Trades Education

The active decision by a student to enter into the skilled trades as a career choice can result in a number of positive outcomes. The skilled trades span many differing skillsets, so work choices are many. Quality of life increases as good-paying jobs result in higher earning capacity. There is the respect that comes from productive work and the professionalism that is required of skilled trades people.

Recognizing the importance of this option for our students, the Government of Nova Scotia committed in 2007 to “further expand choices for hands-on learning in the areas of vocational and composite programming. When implemented, the new programming will offer students opportunities for trade-specific learning in the areas of metals, wood, plumbing and pipefitting, and electrical work.”

The Skilled Trades suite of courses and Skilled Trades Learning Centres are the beginning of the integration of the Skilled Trades in Nova Scotia’s Public Schools.

Below is a possible course map of the Skilled Trades suite of courses.



COURSES OFFERED 2020-2021

SUBJECT AREA	GRADE 10	GRADE 11	GRADE 12
ENGLISH	English 10	English Communications 11 English 11 Adv English 11 (Pre AP)	English Communications 12 English 12 AP English 12 English 12 African Heritage
MATHEMATICS	Math at Work 10 Math Essentials 10 Mathematics 10 (Full Year)	Mathematics Essentials 11 Math at Work 11 Mathematics 11 Extended Mathematics 11 Pre-Calculus 11	Mathematics Essentials 12 Mathematics at Work 12 Mathematics 12 Pre-Calculus 12 AP Calculus 12
SCIENCE	Science 10	Biology 11 Adv Biology 11 (Pre AP) Chemistry 11 Adv Chemistry 11 (Pre AP) Human Biology 11 Oceans 11 Physics 11 Adv Physics 11 (Pre AP) AP Biology 12	Biology 12 Chemistry 12 AP Chemistry 12 Geology 12 Physics 12 AP Physics 12
SOCIAL STUDIES	History 10	African Canadian Studies 11 Canadian History 11 Mi'kmaq Studies 11	Global Geography 12 Global History 12 Sociology 12 (Academic)
FRENCH (CORE)	Core French 10	Core French 11	Core French 12
FRENCH (IMMERSION)	Art Dramatique 10 Imm Français Immersion 10 Histoire Ancienne 10 Imm Sciences 10 Imm Histoire Du Canada 11 Imm	Biologie 11 Imm Français Immersion 11	Français Immersion 12 Histoire Planetaire 12 Imm
FINE ARTS	Drama 10 Music 10 Music 10 Band Music 10 Vocal Visual Arts 10	Drama 11 Music 11 Band Music 11 Vocal Visual Arts 11	Music 12 Band Music 12 Vocal Visual Arts 12
FAMILY STUDIES/ PERSONAL DEVELOPMENT AND CAREER ED	Career Development 10 Community-Based Learning 10 Food for Healthy Living 10 Food & Society 10	Child Studies 11 Career Development 11 Workplace Health & Safety 11 Cooperative Education 11	Canadian Families 12 Cooperative Education 12 Health & Human Services 12
PHYSICAL EDUCATION	Physical Education 10	Physically Active Living 11 Physical Education 11 Yoga 11	Physical Ed Leadership 12 Physical Education 12
BUSINESS EDUCATION		Accounting 11 Tourism 11	Business Management 12 Law 12 Investment and Finance 12
TECHNOLOGY AND SKILLED TRADES	Construction Technology 10 Skilled Trades 10	Business Technology 11 Construction Trades 11 Production Technology 11 Transportation Trades 11	Business Technology 12 Film and Video 12 Home Trades Technology 12 Multimedia 12 Production Technology 12 Skilled Trades 12 Co-op

Please note: Courses listed above are not guaranteed to be scheduled. Course offerings may be adjusted due to low enrollment requests, staffing considerations and/or changes dictated by the Halifax Regional School Board/NS Department of Education.

Nova Scotia Virtual School

The Nova Scotia Virtual School is a common provincial online learning platform created as a joint project between provincial school boards and the Department of Education in Nova Scotia. It provides for the delivery of public school and correspondence courses (Distributed Learning), online extensions of school-based classes (Blended Learning), and supports professional development and online meetings for teachers and other staff of school boards and the Department of Education (Professional Learning).

Research shows that students are most successful in online learning when they are self-motivated, autonomous learners who can resist distractions and work individually towards a learning goal. The courses that are currently offered through the Nova Scotia Virtual School consist of a set of lessons, activities, and projects. It is expected that students will be online every day completing work and meeting with their teacher and fellow students.

Students must sign into their courses each day to complete lessons and assignments. Once a week, students will meet with their teacher and fellow students in an online video conference. Currently, you must be enrolled in a public high school in Nova Scotia to enrol in these to these online courses.

Please note that students should take a maximum of one (1) online course each semester. Full information will also be posted on the Nova Scotia Virtual School website at <http://nsvs.ednet.ns.ca>

ARTS EDUCATION

Education in the arts assists us in perceiving, analyzing and interpreting ourselves, our community, our environment and our cultural heritage. The study of the arts provides the opportunity to see the world through the eyes of others. It adds a new dimension to the students' abilities to see the world, perceive problems and take action towards their solution. Art (the arts) mirrors and influences the human condition reflecting our origins, our history and our aspirations.

Education in the arts should be an essential part of the development of every child. Participation in art, drama and music provides a unique mode of experience that stimulates creative and intuitive thought while developing the intellect. Arts education assists in perceiving and responding to the environment through the senses. It also helps in achieving self-discipline, experiencing success, and realizing personal potential. Learning through the arts provides a fuller understanding and enjoyment of life. It also provides opportunities for students to explore careers in the fine arts.

Grade Ten Courses

VISUAL ARTS 10

(ACADEMIC credit)

This first year of high school art is a foundation program intended to introduce students to the central components of fine art. Emphasis will be placed upon skill development, material and tool manipulation, art theory and informal art history. Students will explore units in drawing, colour theory, painting and 3-D sculpture.

DRAMA 10

(ACADEMIC credit)

Drama 10 is an introductory course in drama focusing on the personal, intellectual, and social growth of the student. Drama 10 provides a foundation for future course work in drama and theatre. Through extensive work in improvisation, in both small and large groups, students gain confidence as they explore and communicate ideas, experiences, and feelings in a range of dramatic forms, such as dramatic movement and mime, dramatization, choral speech, choric drama, group drama and Readers Theatre.

Drama 10 comprises four components: foundation, movement, speech, and theatre. The foundation component, which focuses on building student confidence and trust and creating a supportive learning environment, introduces students to the essential elements of movement and speech. Experiences in movement and speech are extended in the movement and speech components and combined in the exploration of the various dramatic forms.

ART DRAMATIQUE 10

(ACADEMIC French Immersion credit)

See DRAMA 10 for course description

MUSIC 10

(ACADEMIC credit)

This course is offered to students who have some previous music experience, and who have access to an instrument at home. Beginner students are accepted provided they are willing to learn basic skills on guitar or keyboard. Other instruments may be an option at the discretion of the teacher. This course covers music history, music theory (reading and writing music), ear training, and practical playing skills. The class requires participation in class (playing and practicing), written assignments, and tests. Students who are interested in this course should see their guidance counsellor for an information package.

MUSIC 10 (BAND)

(ACADEMIC credit)

Offered to students who have participated in band at the Junior High level. Students who play "non-traditional" band instruments are also welcome (guitar, piano, strings) provided they have some previous experience or private study. Guitar players must be at an intermediate level and pianists at least Grade 5 Royal Conservatory or equivalent. Students with no previous formal training (self-taught) may be admitted after meeting with the music teacher.

Band involves extensive playing, music theory assignments and tests, class participation and some public performances. This class usually meets at a lunch time slot.

MUSIC 10 (VOCAL)

(ACADEMIC credit)

Open to all grade 10 students interested in developing their understanding of singing. No previous experience is required. The vocal classes take place outside of the regular daily schedule and include a vocal class and two choir rehearsals per week. Students will be exposed to proper vocal technique, ear training, music theory and sight reading. Some public performances will be required as part of the choir.

Grade Eleven Courses

VISUAL ARTS 11

(ACADEMIC credit)

This course concentrates on refining skills and further developing an understanding of the central components of drawing, painting, sculpture and design, and informal art history. Students will begin to develop creative problem solving skills and will work more independently.

DRAMA 11

(ACADEMIC credit)

Drama 11 builds on learning experiences provided in Drama 10 and focuses on the students' personal development. Beginning with foundation experiences to develop student confidence and capability, the course allow students to explore movement and speech and to combine these in a greater range of dramatic forms. Selected dramatic forms are explored in depth for presentation

Drama 11 emphasizes the process of creating script and bringing script to production. The course also explores the elements of theatre production and the skills required for presentation or performance.

MUSIC 11 (BAND)

(ACADEMIC credit)

Offered to students who have participated in band in Grade 10. Students who play "non-traditional" band instruments are also welcome (guitar, piano, strings) provided they have some previous experience or private study. Guitar players must be at an intermediate level and pianists at least Grade 5 Royal Conservatory or equivalent. Students with no previous formal training (self-taught) may be admitted after meeting with the music teacher.

Band involves extensive playing, music theory assignments and tests, class participation and some public performances. This class usually meets at a lunch time slot.

MUSIC 11 (VOCAL)

(ACADEMIC credit)

Open to all grade 11 students interested in developing their understanding of singing. No previous experience is required. The vocal classes take place outside of the regular daily schedule and include a vocal class and two choir rehearsals per week. Students will be exposed to proper vocal technique, ear training, music theory and sight reading. Some public performances will be required as part of the choir.

Grade Twelve Courses

VISUAL ARTS 12

(ACADEMIC credit)

This course concentrates on specialization, individual problem-solving, working in depth in selected areas of the central program. Continued emphasis is placed on the central components begun in the foundation and second year. Students at this level will be working independently, exploring personal reflection and a variety of media choices.

MUSIC 12 (BAND)

(ACADEMIC credit)

Offered to students who have participated in band in Grade 11. Students who play "non-traditional" band instruments are also welcome (guitar, piano, strings) provided they have some previous experience or private study. Guitar players must be at an intermediate level and pianists at least Grade 5 Royal Conservatory or equivalent. Students with no previous formal training (self-taught) can be admitted after meeting with the music teacher.

Band involves extensive playing, music theory assignments and tests, class participation and some public performances. This class usually meets at a lunch time slot.

MUSIC 12 (VOCAL)

(ACADEMIC credit)

Open to all grade 12 students interested in developing their understanding of singing. No previous experience is required. The vocal classes take place outside of the regular daily schedule and include a vocal class and two choir rehearsals per week. Students will be exposed to proper vocal technique, ear training, music theory and sight reading. Some public performances will be required as part of the choir.

BUSINESS EDUCATION

Business Education is a related and integral part of the total program of education in our high school. Business Education not only provides effective occupational instruction for high school students desiring careers in business, but also makes an important contribution to the comprehensive education of all high school students. Business Education courses may be taken by any student as part of the high school completion program.

Grade Eleven Courses

ACCOUNTING 11

(ACADEMIC credit)

The aims of the high school accounting courses are:

1. to develop an understanding of accounting principles and concepts encountered in business and personal activities;
2. to provide a sound foundation for additional study beyond the high school level;
3. to become familiar with the applications, principles and importance of data processing in accounting procedures.

The following topics are covered in the introductory course: accounting for starting a business; analysis of business transactions and how they affect the business records; the use of accounting records such as journals, ledgers, and source documents; processing and control of cash receipts and payments; preparation of reports to management; procedures required in merchandising businesses; payrolls; year-end accounting activities and many other items which keep the student interested and involved.

Accounting 11 is available to Grade 10 students as an elective.

Grade Twelve Courses

BUSINESS MANAGEMENT 12

(ACADEMIC credit)

This exciting new course introduces students to business management concepts through the use of technology. Unit 1 provides an overview of the current business environment and introduces students to business terminology and concepts. Unit 2 provides an in-depth analysis of management roles and responsibilities. Students will relate their own personal attributes, skills, and knowledge to management functions (leadership, planning, decision-making, organizing and controlling) as well as to different management styles. Unit 3 presents challenges facing 21st century managers such as ethics, knowledge management, organizational change, and adapting to the rapid pace of technological innovation. Unit 4 is an independent project in which students select a specific industry and design their own company with a focus on management. Note: This course involves regular computer use for research and design.

LAW 12

(ACADEMIC credit)

The Canadian law course is designed to provide students with a knowledge of law and its function in society and the opportunity to develop skills and attitudes that will enable them to understand the process of law. Topics include the Canadian legal system, crimes and crime control, injuries and wrongs, human rights, property rights, promises and agreements, business relations, family relations, and courts and trials.

INVESTMENT AND FINANCE 12

(ACADEMIC credit)

Investment and Finance 12 will give students the opportunity to become a financially literate citizen who will learn to understand and deal with money as a life skill. Students in this course will set financial goals and understand how to make wise decisions when spending, saving and investing. Students will expand their understanding through assigned readings, independent research, assignments, and individual or group projects. Students will develop financial skills which they can apply during their lifetime and learn to make informed financial decisions that can influence their financial future. Modules include the following: Lifestyle and Earnings, Saving, Spending, and Investing. Upon completion of this course, students will be able to comprehend and evaluate a very broad range of investment options which are available in the market place.

Prerequisite: Successful completion of Mathematics 10

Recommended Prerequisite: Successful completion of Mathematics 11.

ENGLISH LANGUAGE ARTS

Grade Ten Courses

ENGLISH 10

(ACADEMIC credit)

English 10 emphasizes proficiency in using oral language for a variety of purposes. Learning experiences include the following:

- Exploratory and informal talk: conversation, focused discussion with an identifiable purpose, such as brainstorming, speculating, and problem solving.
- Structured activities, including symposia, panels, and interviews.
- Dramatic representations: monologues, role playing, and improvisation.
- Performance of texts: individual and choral performance and Readers Theatre.
- Formal presentations: seminars, debates, public speaking, and reports.
- Focused listening activities to interpret and evaluate ideas and information from a range of sources

Basic skills in writing and interpreting literature are important aspects of this entrance level in English.

Students will begin to apply their writing skills to producing formal and informal essays.

Options are available for students wishing additional support or enrichment. All grade 10 students will write the Provincial English Exam.

Grade Eleven Courses

ENGLISH COMMUNICATIONS 11

(GRADUATION credit)

English/Communications courses are intended for students who may need additional support in their development as readers, writers, and language users. This course focuses on developing language skills necessary for the workplace. Learners must also have opportunities to read widely in their interest areas and to create both written and visual texts to enhance their reading and writing fluency. The use and the influence of media such as television, radio, and film are also examined in this course.

ENGLISH 11

(ACADEMIC credit)

English 11 is intended for students whose goals include post-secondary study. Learning experiences should enable students to:

- Study and give detailed accounts of complex and sophisticated texts and issues.
- Be perceptive and analytical in making sophisticated adult judgements.
- Be critical readers of literary texts
- Be critical viewers
- Express themselves precisely when writing for often complex purposes
- Be capable editors of their own and others' writing.
- Communicate confidently and effectively in the formal style and language required by some situations.
- Demonstrate control of language processes.

ADVANCED ENGLISH 11 (Pre AP)

(ADVANCED credit)

This is a very demanding course which puts emphasis on historical literature and on the development of language itself. Selected texts transcend various cultures and time periods. The usual focus on writing and speaking is continued here, with increased emphasis on the development of the argument. Students will also have opportunities to write imaginatively.

Prerequisite: strong interest, willingness to apply oneself and the recommendation of the Grade 10 teacher. Students planning to take AP English 12 should take Advanced English 11 (Pre AP).

Grade Twelve Courses

ENGLISH COMMUNICATIONS 12

(GRADUATION credit)

This course is a high school completion course for students who are looking towards career and educational options other than university. All students will work toward the same outcomes in their Grade 12 year but English 12 and English Communications 12 will differ in terms of pace, scope, emphases and resources. The emphases are on accurate and effective communication and the reading, viewing and studying of a wide variety of texts.

ENGLISH 12

(ACADEMIC credit)

English 12 is intended for students whose goals include post-secondary study. Learning experiences should enable students to:

- Study and give detailed accounts of complex and sophisticated texts and issues.
- Be perceptive and analytical in making sophisticated adult judgements.
- Be critical readers of literary texts
- Be critical viewers
- Express themselves precisely when writing for often complex purposes
- Be capable editors of their own and others' writing.
- Communicate confidently and effectively in the formal style and language required by some situations.
- Demonstrate control of language processes.

ADVANCED PLACEMENT ENGLISH 12

(ADVANCED credit)

AP English is a rigorous course that is designed to take students beyond the English 12 outcomes to prepare students to meet the requirements for university credit. AP English will meet the needs of students who are interested in the study of language and literature through close readings of a variety of texts that span the globe and major literary eras. The expectation is that students have a desire to read widely and consistently throughout the year in preparation for the AP Exam in May.

Prerequisite: Recommendation of Advanced English 11 teacher (Pre AP)

ENGLISH 12 AFRICAN HERITAGE

(ACADEMIC credit)

English 12 African Heritage examines texts with a focus on African Heritage, including short fiction, novels, poetry, spoken word and various elements of African oral traditions. The course views literature through a historical lens, spanning from prehistoric Africa throughout slavery, into reconstruction and renaissance, and then to the civil rights era. This course fulfills the grade 12 English language arts requirement for graduation.

FAMILY STUDIES, PERSONAL DEVELOPMENT AND CAREER EXPLORATION

Family Studies prepares the student for life as well as providing a grounding for many courses in post-secondary institutions, including careers involved in health services professions.

Grade Ten Courses

FOOD FOR HEALTHY LIVING 10

(OPEN half credit)

Food for Healthy Living 10 (Open) is a half-credit course that is combined with International Foods 10. Energy, growth, and health are affected by healthy food choices. Students plan and prepare meals that complement healthy life choices. The course explores how life choices and food availability affect diet, and students will learn to identify nutrition issues that require dietary modifications. The impact of food marketing and advertising on people's food choices is addressed.

FOOD IN SOCIETY 10

(OPEN half credit)

Food in Society 10 (Open) is a half-credit course that is combined with Food for Healthy Living 10. Students "travel" on a virtual global foods tour exploring diverse historical, geographical, cultural and nutritional components of international cuisine. The course includes discussions with community guest speakers, demonstrations, and food tasting experiences. Students examine global food issues affecting individuals, families and communities locally and around the world.

CAREER DEVELOPMENT 10

(OPEN credit)

Career Development 10 is designed to help students to understand and manage themselves, to manage their personal lives and resources (including financial resources), and to develop the ability to organize and shape their careers.

Students in Career Development 10 develop their abilities to communicate, think, and deal with their feelings. They explore realistic personal goals, assess their own abilities, and realize how these actions affect their learning and decision-making processes. They develop awareness of their place in the community and the value to their personal growth of giving service to the community.

Career Development 10 consists of the following modules:

- Module 1: Personal Development
- Module 2: Career Awareness
- Module 3: Workplace Readiness
- Module 4: Financial Management
- Module 5: LifeWork Portfolio

Grade Eleven Courses

CHILD STUDIES 11

(OPEN credit)

Child Studies is a full credit course designed to explore the meaning and implications of responsible parenthood, to acquire current information regarding reproduction, pregnancy and childbirth, to explore significant issues of early childhood, and to apply the understanding of child development to the care and guidance of children. The course is developed around five modules:

- Decisions about Parenthood.
- The Beginning of Parenthood
- Early Childhood Development
- Special Concerns in Child Development
- Practical Experiences with Children

CAREER DEVELOPMENT 11

(HALF credit)

Career Development 11 is designed to help students continue to develop and refine a career and life plan which was begun in Career Development 10. Students refine their understanding of, and readiness for, the world of work and extend their skills in personal financial management.

Career Development 11 consists of the following modules:

- Module 1: Career Awareness
- Module 2: Work Cultures
- Module 3: Financial Management
- Module 4: LifeWork Portfolio

WORKPLACE HEALTH AND SAFETY 11

(HALF credit)

Workplace Health and Safety 11 is a course in which students receive training in the Workplace Hazardous Systems Information System, and complete certification in Emergency level First Aid, and Occupational Health and Safety online training. Online safety learning tools, including Passport to Safety, are used.

Workplace Health and Safety 11 consists of the following modules:

- Module 1: Fundamentals of Workplace Health and Safety
- Module 2: Workplace Hazards, awareness and Control

Career Development 11 and Workplace Health and Safety must be taken together.

TOURISM 11

(ACADEMIC course)

This course is designed for students who are interested in the hospitality/tourism industry. The course focuses on career planning and employability skills and on industry design and development (for example, develop a plan for eco-tourism in South America). Students apply and expand their learning in community or workplace settings through job shadowing, field trips, and work experience. Learning experiences have a strong applied focus with an emphasis on integrating, applying, and reinforcing learning in other courses.

Grade Twelve Courses

CANADIAN FAMILIES 12

(OPEN credit)

Canadian Families 12 is designed to develop an understanding of the nature of families in historical, social, and cultural contexts; to promote awareness of the role played by economics, work, and shelter in maintaining successful families; and to examine the physical, social, and emotional dimensions of family health in adopting a preventive approach to family well-being. Throughout the course students will explore the evolving family and its role in society. Students will research the challenges faced by today's Canadian families and look at society's response to those challenges which include employment, consumerism, and providing basic needs of shelter, food and nurturing throughout years. Related career opportunities will be researched in each module.

This course is developed around six modules:

Module 1: Images of Families

Module 2: Family Development

Module 3: Families in Later Life

Module 4: Family Well-Being

Module 5: Family and the Economy

Module 6: The Family and Shelter

Health and Human Services

(Academic credit)

This is an introductory course of interest to those who are considering post-secondary education or employment in health services or human services such as continuing care, nursing (LPN), addictions counselling, youth worker, corrections, law enforcement, educational support, and gerontology, recreation, and leisure studies. This course provides students with skills and knowledge in human development, ethics, the helping process, interpersonal and personal development, wellness, written and verbal communications, and computer applications. Students will explore skills and knowledge specific to defined occupations. Group work, case studies, community projects and agency interaction are some of the learning strategies used to ensure practical application of the theory studied.

Leadership 12 (Link Crew)

(Academic Course)

This leadership course will provide the self-motivated and energetic student opportunities to participate and make a difference in the school and community. The purpose of the course is three-fold: to generate personal growth and leadership development for students, to positively influence the culture of the school, increase school spirit, and to engage in mentorship connections within the community. Students will be expected to partner with both younger and older students in mentor and mentee positions in their role as a Link Crew Leader. Students will develop leadership skills and build positive, realistic attitudes toward both self and society. Modules include the following: public speaking, communication, goal setting, team building, problem solving, risk taking, project planning, leadership development, service to others, and organizational techniques. Students may have to make application to be accepted into this program.

PLEASE NOTE: Leadership 12 students must be prepared to participate in events and activities that extend the hours of the regular school day. The following will be required in order to successfully meet the outcomes

of the course: 15 hours of school service and training (Orientation Day Training, Orientation Day), 10 hours of community service, and 10 hours for school events organized by the class (Social and Academic Follow-Ups). To achieve these ends, students will be engaged in individual / self-directed work as well as group and community work.

COOPERATIVE EDUCATION

Cooperative Education involves methods of learning that links school and the workplace through an active relationship between students, teachers, parents and community. Co-operative Education provides the opportunity for a student to earn a high school credit when taken in conjunction with his/her other courses. The program integrates in-school courses with a 100 hour out of school placement and a 25 hour in-school component. The program enriches, enhances and reinforces knowledge and skills as the student integrates school subjects and workplace learning. To complete a community placement, students must be of 16 years of age.

Co-operative Education consists of 3 components:

- In-school component
- Community placement
- Reflective learning

The in-school component is structured to prepare students for the community placement. . The *community placement* component for each student must be carefully designed through co-operation between the school staff and the work place host. The community placement must be monitored on a regular basis and carefully evaluated, making use of the student's learning assessment and evaluation plan. The learning plan must clearly indicate the goals and objectives of the community placement.

Reflective learning sessions are held on a regular basis throughout the school year, providing students with an opportunity, in an individual or group setting, to reflect on their community placement experience, to make specific connections between the community placement experience and the related courses, and to expand on the material learned in the classroom. Students complete a portfolio and a reflective report or essay. These activities are an integral part of all work education programs, however, they are emphasized and developed to a greater degree in Co-operative Education credit courses.

FRENCH SECOND LANGUAGE

CORE FRENCH

CORE FRENCH 10, CORE FRENCH 11, AND CORE FRENCH 12

(ACADEMIC 1 credit each)

The senior high French program is designed to develop comprehension, communication, and interaction skills and strategies through experiential teaching materials that incorporate a variety of authentic documents. Topics, tasks, and final projects are aligned with students' experiences and interests. Areas to study include the future, career plans, the media, the arts, social and technological trends, as well as Francophone cultures and multiculturalism.

FRENCH IMMERSION LANGUAGE ARTS

FRANCAIS IMMERSION 10

(ACADEMIC credit)

This immersion course emphasizes using French for a variety of purposes. Students are engaged in listening and speaking situations and in responding to a variety of texts. Literature includes articles, poems, mythology, short stories and novels. Writing activities include composing documents to present information and to express feelings. The course also explores other forms of viewing and representing.

FRANCAIS IMMERSION 11

(ACADEMIC credit)

In the grade 11 French immersion course, students continue to listen and respond to a variety of texts and to communicate orally information on various topics. Students are involved in such activities as drama and improvisation. Reading and literature include articles, biographies, poems, short stories and novels. Writing activities include letters, tales, short stories, reports and research papers. The course also explores other forms of viewing and representing.

FRANCAIS IMMERSION 12

(ACADEMIC credit)

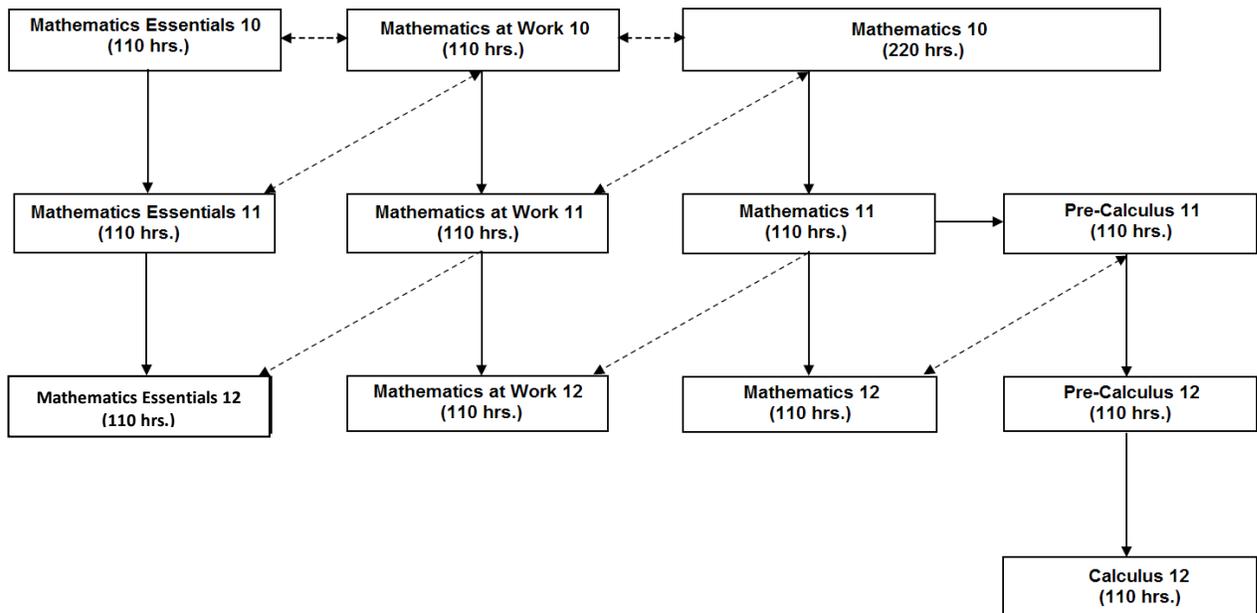
In grade 12 French immersion students continue to develop their listening and oral skills in French while engaged in a wide range of activities. Reading and literature include many forms and genres, such as articles, position papers, poetry, legends, short stories, novels and drama. Students write informative reports, research papers and briefs. The course also explores other forms of viewing and representing.

MATHEMATICS

The study of Mathematics is important for academic and career success. Upon graduation from high school students should be confident in their ability to communicate and reason mathematically. They should be able to use problem solving techniques to investigate and make decisions about everyday tasks.

The NS Department of Education has adopted a new mathematics curriculum. All incoming grade 10 students will be taking courses based on this new curriculum. The revised Nova Scotia senior high mathematics program will include the following four pathways with corresponding topics:

- Mathematics Essentials (graduation credits)
- Mathematics at Work (graduation credits)
- Mathematics (academic credits)
- Pre-Calculus (advanced credits)



Grade Ten Courses

In 2015-16 three mathematics courses will be available at the grade 10 level:

- Mathematics Essentials 10: (110 hours), 1 graduation credit
- Mathematics at Work 10: (110 hours), 1 graduation credit
- Mathematics 10: (220 hours), 2 academic credits

MATHEMATICS ESSENTIALS 10

(GRADUATION, 1 credit)

This course will be presented as a 110-hour course.

Mathematics Essentials 10 is an introductory high school mathematics course designed for students who do not intend to pursue post-secondary study or who plan to enter programs that do not have any mathematics pre-requisites.

Mathematics Essentials courses are designed to provide students with the development of the skills and understandings required in the workplace, as well as those required for everyday life at home and in the community. Students will become better equipped to deal with mathematics in the real world and will become more confident in their mathematical abilities.

The typical pathway for students who successfully complete Mathematics Essentials 10 is Mathematics Essentials 11 followed by Mathematics Essentials 12.

Students in Mathematics Essentials 10 will explore the following topics:

mental math, working and earning, deductions and expenses, paying taxes, making purchases, buying decisions, probability, measuring and estimating, transformation and design, and buying a car.

MATHEMATICS AT WORK 10

(GRADUATION, 1 credit)

This course will be presented as a 110-hour course.

Mathematics at Work 10 is an introductory high school mathematics course which demonstrates the application and importance of key math skills.

Mathematics at Work courses are designed to provide students with the mathematical understandings and critical-thinking skills identified for direct entry into the work force or for entry into programs of study that do not require *academic* mathematics.

The typical pathway for students who successfully complete Mathematics at Work 10 is Mathematics at Work 11 followed by Mathematics at Work 12

Students in Mathematics at Work 10 will explore the following topics:

measurement, area, Pythagorean theorem, trigonometry, geometry, unit pricing and currency exchange, income and basic algebra.

MATHEMATICS 10

(ACADEMIC, 2 credits)

This course will be presented as a 220-hour course. This will mean that students will have mathematics class every day for their grade 10 year.

Mathematics 10 is an academic high school mathematics course which is a pre-requisite for all other academic and advanced mathematics courses. Students who select Mathematics 10 should have a solid understanding of mathematics from their junior high years. This means that students would have demonstrated satisfactory achievement of learning outcomes in grade 9 mathematics.

All students following the academic or advanced pathway will need to take Mathematics 10 followed by Mathematics 11. These courses are to be taken consecutively, not concurrently.

There are two typical pathways for students who successfully complete Mathematics 10:

For those students intending to follow the academic pathway, Mathematics 10 will be followed Mathematics 11 and then Mathematics 12. (Mathematics 11 and Mathematics 12 are designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus).

For those students intending to follow the advanced pathway, Mathematics 10 will be followed by Mathematics 11, then Pre-Calculus 11 and Pre-Calculus 12.

Alternatively, students who successfully complete Mathematics 10 may choose to select a graduation credit in grade 11.

Students in Mathematics 10 will explore the following topics:

measurement systems, surface area and volume, right triangle trigonometry, exponents and radicals, polynomials, linear relations and functions, linear equations and graphs, solving systems of equations, and financial mathematics.

Grade Eleven Courses

MATHEMATICS ESSENTIALS 11

(GRADUATION, 1 credit)

This course will be presented as a 110-hour course.

Mathematics Essentials 11 is designed for students who either do not intend to pursue post-secondary study or plan to enter post-secondary programs that do not have any mathematics pre-requisites.

The Mathematics Essentials pathway is designed to provide students with the development of the skills and understandings required in the workplace, as well as those required for everyday life at home and in the community. Students will become better equipped to deal with mathematics in their everyday life and will become more confident in their mathematical abilities.

Students in Mathematics Essentials 11 will explore the following topics: mental mathematics; collecting, organizing and graphing data; borrowing money; renting or buying; household budgets; investing money; measuring; and 2-D and 3-D design, mathematics in content areas such as science and social studies.

Prerequisite: Successful completion of Mathematics Essentials 10 or Mathematics at Work 10.

MATHEMATICS AT WORK 11

(GRADUATION, 1 credit)

This course will be presented as a 110-hour course.

Mathematics at Work 11 demonstrates the application and importance of key mathematical skills.

The typical pathway for students who successfully complete Mathematics at Work 11 is Mathematics at Work 12. (The Mathematics at Work pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for direct entry into the work force or for entry into programs of study that do not require academic mathematics.)

Some students who successfully complete Mathematics at Work 11 may choose to take Mathematics for the Workplace 12.

Students in Mathematics at Work 11 will explore the following topics:

measurement systems volume, 2-D and 3-D geometry, scale, exploded diagrams, numerical reasoning, personal budgets, compound interest, financial institution services, and formula manipulation for various contexts.

Prerequisite: Successful completion of Mathematics at Work 10 or Mathematics 10.

MATHEMATICS 11

(ACADEMIC, 1 credit)

This course will be presented as a 110-hour course.

Mathematics 11 is an academic high school mathematics course. Students who select Mathematics 11 should have a solid understanding of the Mathematics 10 curriculum.

Mathematics 11 is a prerequisite for Pre-calculus 11. These courses are to be taken consecutively, not concurrently.

There are two typical pathways for students who successfully complete Mathematics 11:

For those students intending to follow the academic pathway, Mathematics 11 will be followed Mathematics 12. (Mathematics 11 and Mathematics 12 are designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that require an academic or Pre-calculus mathematics credit).

For those students intending to follow the advanced pathway, Mathematics 11 will be followed by Pre-calculus 11, and then Pre-calculus 12.

Alternatively, students who successfully complete Mathematics 11 may choose to select a graduation level course in grade 12.

Students in Mathematics 11 will explore the following topics: applications of rates, scale diagrams and factors, inductive and deductive reasoning, an introduction to proof, cosine law, sine law, spatial reasoning, statistics, systems of linear inequalities, and quadratic functions.

Prerequisite: Successful completion of Mathematics 10.

EXTENDED MATHEMATICS 11

(ACADEMIC, 2 credits)

Extended Mathematics 11 is a 220-hour course that is scheduled over the duration of the school year, September to June. Students who successfully complete this course will receive one grade 11 academic mathematics credit and one grade 11 technology credit. Extended Mathematics 11 is an academic high school mathematics course. Students who select Extended Mathematics 11 will complete the curriculum outcomes for the semestered Mathematics 11 course and additional concepts in Statistics and Data Analytics. They will have extra time to explore concepts using a variety of learning experiences and use technology to enhance their learning. The typical pathway for students who successfully complete Extended Mathematics 11 will be to take Mathematics 12. Alternatively, students who successfully complete Extended Mathematics 11 may choose to select either Mathematics at Work 12 or Mathematics Essentials 12. While not the typical pathway, Extended Mathematics 11 can also be used as a pre-requisite for Pre-calculus 11. These courses are to be taken consecutively, not concurrently.* Students in Extended Mathematics 11 will explore the following topics: linear programming, applications or rates, scale diagrams and factors, inductive and deductive reasoning, an introduction to proof, cosine law, sine law, spatial reasoning, statistics, systems of linear inequalities, and quadratic functions, inference making from statistical summaries, analyzing and presenting data and how to extract meaning from data.

Prerequisite: Successful completion of Mathematics 10

PRE-CALCULUS 11

(ADVANCED, 1 credit)

This course will be presented as a 110-hour course.

Pre-calculus 11 is an advanced high school mathematics course. Students who select Pre-calculus 11 should have a solid understanding of the Mathematics 11 curriculum. Pre-calculus 11 is a prerequisite for Pre-calculus 12. These courses are to be taken consecutively, not concurrently.

The typical pathway for students who successfully complete Pre-calculus 11 is Pre-calculus 12. (Courses in the Pre-calculus pathway are designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that require the study of theoretical calculus.)

Some students who successfully complete Pre-calculus 11 may choose to take Mathematics 12.

Alternatively, students who successfully complete Pre-calculus 11 may choose to select a graduation credit in grade 12.

Students in Pre-calculus 11 will explore the following topics:

absolute value, radical expressions and equations, rational expressions and equations, angles in standard position, analyze and solve quadratic equations, linear and quadratic equations and inequalities in two variables, arithmetic and geometric sequences, and reciprocals of linear and quadratic functions.

Prerequisite: Successful completion of Mathematics 11.

Grade Twelve Courses

MATHEMATICS ESSENTIALS 12

(formerly called Mathematics for the Workplace)

(GRADUATION, 1 credit)

This course will be presented as a 110-hour course.

The Mathematics Essentials pathway is designed to provide students with the development of the skills and understandings required in the workplace, as well as those required for everyday life at home and in the community. Students will become better equipped to deal with mathematics in their everyday life and will become more confident in their mathematical abilities.

Mathematics Essentials 12 is designed for students who either do not intend to pursue post-secondary study, or plan to enter post-secondary programs that do not have any mathematics pre-requisites. The content of this course will help students work toward improving the mathematical knowledge base needed for work directly related to the trades. This course will be modular based on project orientation.

Students in Mathematics Essentials 12 will do the following modules:

- Module 1: Measurement
- Module 2: Mini-project: Mathematics and Career Exploration
- Module 3: Ratio, Rate, and Proportion
- Module 4: Major Project: Math Preparation for the Workplace

Prerequisite: Successful completion of Mathematics Essentials 11 or Mathematics at Work 11. The prerequisite for Mathematics Essentials 12 must be taken and successfully completed prior to starting Mathematics Essentials 12. Therefore, these courses are to be taken consecutively, not concurrently, and the order may not be reversed.

MATHEMATICS AT WORK 12

(GRADUATION credit)

The Mathematics at Work pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for direct entry into the work force or for entry into programs of study that do not require academic mathematics. Mathematics at Work 12 is the third course in this pathway.

Students in Mathematics at Work 12 will student the following topics:

- measurement and probability
- measures of central tendency
- scatterplots
- linear relationships
- owning and operating a vehicle
- properties of polygons
- transformations
- trigonometry

Prerequisite: Successful completion of Mathematics at Work 11 or Mathematics 11. The prerequisite for Mathematics at Work 12 must be taken consecutively, not concurrently, and the order may not be reversed.

MATHEMATICS 12

(ACADEMIC credit)

The Mathematics pathway is designed to provide students with the mathematical understandings and critical thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus. Mathematics 12 is the third course in this pathway.

Students who select Mathematics 12 should have a solid understanding of the Mathematics 11 curriculum.

Students in Mathematics 12 will study the following topics:

- borrowing money
- investing money
- set theory
- logical reasoning
- counting methods
- probability
- polynomial functions
- exponential and logarithmic functions
- sinusoidal functions

Prerequisite: Successful completion of Mathematics 11 or Pre-calculus 11. The prerequisite for Mathematics 12 must be taken and successfully completed prior to starting Mathematics 12. Therefore, these courses are to be taken consecutively, not concurrently, and the order may not be reversed.

PRE-CALCULUS MATHEMATICS 12

(ADVANCED credit)

The Pre-calculus pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that require the study of theoretical calculus.

Students who select Pre-calculus 12 should have a solid understanding of the Pre-calculus 11 curriculum.

Students in Pre-calculus 12 will study the following topics:

- transformations
- radical functions
- polynomial functions
- trigonometry
- exponential and logarithmic functions
- rational functions
- function operations
- permutations, combinations and the binomial theorem

Prerequisite: Successful completion of Pre-calculus 11. Pre-calculus 11 must be taken and successfully completed prior to starting Pre-calculus 12. Therefore, these courses are to be taken consecutively, not concurrently, and the order may not be reversed.

ADVANCED PLACEMENT CALCULUS 12

(ADVANCED credit)

This course is designed for those students who wish to build a foundation in the study of calculus prior to taking a course at the university level. The concepts of a limit, derivative, definite integral and indefinite integral will be developed numerically, graphically, verbally, algebraically and in context. Students will construct the fundamental properties of derivatives; explore derivatives of trigonometric, exponential and logarithmic functions; and apply the processes to curve sketching, related rates, and optimization problems. The study of differential equations and the area under the curve will evolve into The Fundamental Theorem of Calculus. Applications will include areas between curves, volumes of solids, and lengths of curves.

Prerequisite: Successful completion Pre-calculus Mathematics 12 (Pre AP).

PHYSICAL EDUCATION

The general goals of the program are to have participating students:

- develop an understanding of the importance of personal physical fitness
- develop an enjoyment and appreciation of lifelong involvement in physical activity
- increase skill levels, knowledge and leadership in a variety of physical activities
- provide opportunities for social growth and interaction through participation in a variety of activity related settings

Course structure:

The PHE 10 and PHE 11 curriculum is divided into seven categories. The outcomes are progressive and sequentially based as students move from grade to grade.

1. Personal Fitness

The focus will be on a way of life that values physical activity and its integration into daily routines. Students will participate in activities that promote well-being and a personal level of physical fitness (e.g., skipping, resistance training, flexibility training).

2. Physical Activity and Society

Sport history and culture will be presented as a basis for studying today's trends in physical activity and wellness (e.g., Olympics, sport history in Nova Scotia, etc.).

3. Personal and Group Safety

Risk management, safety procedures and the proper use of equipment will be incorporated into day-to-day activities.

4. Sport Science

Human anatomy, basic physiology and sport specific care and prevention of injury will be introduced (e.g., identifying muscle groups, bones and their function, sprains, etc.).

5. Outdoor Pursuits

Emphasis will be placed on: developing safety, survival and orienteering skills; developing an appreciation for low impact camping; and, selecting proper equipment for wilderness tripping (e.g., winter camping, canoeing, cross-country skiing, etc.).

6. Leadership

The focus will be leadership styles and the Experiential Learning Cycle. Students will experience individual and cooperative problem-solving skills during participation in a variety of initiatives (e.g., ice breakers, initiative tasks, trust activities, service learning project).

7. Sport Experience

The focus will be on refining and executing sport specific skills during drills and modified games. Traditional and non-traditional games and sports will be examined (e.g., volleyball, football, dance, omniken ball, etc.).

PHYSICAL EDUCATION 10

(OPEN Credit)

This course will provide students with a variety of fitness and sport experiences to enhance their understanding of personal fitness and growth. Physical Education 10 includes some theory components, coupled with predominately active experiences whereby students will have the opportunity to participate in a variety of outdoor and indoor fitness, sport, and recreational experiences. The emphasis of this curriculum is to provide students with experiences that require them to take and reflect on their personal responsibility for active, healthy living now and throughout life. The course is divided into four modules: Outdoor Pursuits (examples: mountain biking, canoeing, skateboarding, GPS activities...), Exercise Science, Personal Fitness and Leadership.

PHYSICALLY ACTIVE LIVING 11

(OPEN credit)

This full-credit course is designed to engage students in a wide range of physically active experiences, with an overall theme of exploring options and opportunities for being active for life, both in school and in their community. Physically Active Living 11 encompasses both an activity component and a theory component, with an emphasis on engagement in physical activity.

The activity component of the course is designed to provide opportunities for students in active experiences that engage youth in traditional and non-traditional forms of physical activity as well as fitness.

The theory component of the course will enhance student understanding of healthy eating, goal setting, mental and emotional health and addiction prevention highlighting the connection between healthy living and being physically active.

PHYSICAL EDUCATION 11

(OPEN credit)

This physical education course places greater emphasis on lifetime recreation activities, with a balance between indoor and outdoor activities. Physical fitness and the development of leadership skills continue as priorities.

YOGA 11

(ACADEMIC credit)

Yoga 11 will introduce students to the tradition of Yoga with its various forms and styles. The intention is that students will develop a lifelong personal practice of yoga to maintain vibrant health and develop healthy relationships with self and others while enjoying it as a regular form of physical and leisure activity. Students will be participating in various activities that will include physical practice, personal reflection, meditation, group discussion, and classroom theory.

The physical aspect of yoga will include the acquisition and development of skills including strength, flexibility, cardiovascular endurance, balance, regulation of energy through breathing, and mental focus. All of these skills are of great benefit to overall health and to other physical pursuits.

The course is divided into three modules: Proper Breathing and Asana Practice; The Origins and Philosophy of Yoga, and Integrating a Mindful Practice.

PHYSICAL EDUCATION 12

(OPEN credit)

Physical Education 12 is designed for students who want to remain physically active in their final year of high school. A variety of sports, fitness, co-operative games and recreational activities will make up this course. This program develops maturity through an active lifestyle program so the students can remain active once they leave the school setting. This course meets the physical active requirement for NS Graduation.

PHYSICAL EDUCATION LEADERSHIP 12

(ACADEMIC credit) Recommended for Grade 12 level students.

This course is set up to include theoretical, organizational and practical components. Classroom sessions will be directed toward the understanding of “group dynamics” and the development of planning and organizational skills. Throughout the year, students will participate in assisting school-based functions (e.g., intramurals, etc.) and will develop and organize their own community/school service project(s) as part of their evaluation. In addition, students will be involved in Outdoor Education trips as well as other activities within the gymnasium to satisfy the practical component of their evaluation. Some experiences are minor while others require teamwork and a commitment to success.

This course is designated students who like to be active, enjoy working in a group setting and are willing to take responsibility for enhancing the learning of their fellow “Leaders”.

SCIENCE

Grade Ten Courses

SCIENCE 10

(ACADEMIC credit)

The Science 10 course is designed to introduce students to the relationships among science, technology and society. The course will allow students to develop an understanding of the many ways that science touches their lives and shapes their world. Science 10 will present students with the tools necessary to become scientifically and technologically literate, and will provide a foundation for further study in various science disciplines. The four modules of study are Sustainability of Ecosystems, Chemical Reactions, Weather Dynamics, and Motion.

All students entering Grade 10 should register for Science 10. Options are available for students wishing support or enrichment.

SCIENCES 10 IMM

(ACADEMIC French Immersion credit)

See SCIENCE 10 for course description

Grade Eleven Courses

BIOLOGY 11

(ACADEMIC credit)

The Biology 11 course emphasizes biodiversity, matter and energy for life, and maintaining equilibrium in living systems. Activity/laboratory work forms an integral part of the course and is generally used to reinforce ideas, followed by classroom discussion to further develop concepts. Topics include: biological classification, cell biology, microscopy, and systems of living organisms including respiration, digestion, and circulation.

Recommended Prerequisite: Science 10

ADVANCED BIOLOGY 11 (Pre AP)

(ADVANCED credit)

Advanced Biology 11 is an excellent introductory course for those students with an above average interest and ability in science and are considering a career in life sciences. This course is essentially the same as Biology 11 but has a stronger focus on research, project work and independent study. Classroom work is complimented with activities and laboratory explorations. Topics include: Matter and energy for life, Biodiversity, Interactions among Living Things, and maintaining dynamic equilibrium through the study of the systems of living organisms including respiration, digestion, excretion and circulation. This course is recommended for students planning to take AP Biology 12.

Recommended Prerequisite: Science 10

BIOLOGIE 11 IMM

(ACADEMIC FRENCH IMMERSION credit)

See BIOLOGY 11 for course description

Recommended Prerequisite: Sciences 10 IMM

HUMAN BIOLOGY 11

(GRADUATION credit)

This course will give students a basic understanding of the biology of the human body. As well as looking at the major human body systems, students will examine the impact that the life choices we make as well as the environment has on the health of these systems. Emphasis is placed on labs and hands on activities which are then supported by class discussions to help students feel confident in their understanding of the subject. A number of course assignments will focus student awareness on the needs of their local community. Topics to be covered include: the skin, diet and nutrition, the digestive system, cardiovascular health, muscles and bones, and the nervous system.

Recommended Prerequisite: Science 10

CHEMISTRY 11

(ACADEMIC credit)

Chemistry 11 is designed to be an introduction to the fundamentals of chemistry for the science-bound student. Students will learn about the composition of matter and how one kind of matter can be changed into other kinds of matter. The topics covered in class are reinforced with laboratory work. Topics covered include: matter, atomic theory, the periodic table, chemical bonding, naming compounds and writing chemical formulae, types of chemical reactions, balancing chemical equations, stoichiometry, and an introduction to organic chemistry. Organic chemistry is included in this course because it is recommended for students taking Biology 12.

Recommended Prerequisites: Mathematics 10 and Science 10

ADVANCED CHEMISTRY 11 (Pre AP)

(ADVANCED credit)

Advanced Chemistry 11 uses a problem-solving approach to the study of chemistry. It emphasizes chemical principles rather than descriptive chemistry and the relationship between experiment and theory. This program is an excellent introduction to chemistry for those students who have an above average interest and ability in science. Topics include: atomic theory, periodic law, chemical bonding, liquid and solid phases, organic chemistry, naming compounds and writing formulae, mole calculations and chemical equations.

Recommended Prerequisites: Mathematics 10 and Science 10

OCEANS 11

(ACADEMIC credit)

Oceanography 11 is a multidisciplinary course encompassing such scientific fields as biology, chemistry, physics and geology. This course explores the relationship between marine organisms in various ocean environments, examines basic chemical principles of seawater, investigates the concepts of waves, tides and currents and their effects on coastlines, and delves into the structures of the ocean bottom involved in the formation of ocean basins and the concept plate tectonics. Emphasis will be placed on the importance of the ocean as a sustainable resource with particular interest in the ocean environment of the Atlantic Provinces.

Recommended Prerequisite: Science 10

PHYSICS 11

(ACADEMIC credit)

Physics 11 is an introduction to the fundamentals of Physics for the science-bound student. Topics covered include motion, forces, sound, light and wave theory. The main focus of the course is a conceptual understanding of the curriculum through classroom demonstrations, discussions, problem solving and lab work. Measurement, algebra and numerical computation are developed as tools for understanding the world around us.

Recommended Prerequisites: Mathematics 10 and Science 10

ADVANCED PHYSICS 11 (PRE AP)

(ADVANCED credit)

This is an excellent introductory course in physics for students with a particular interest in science and proven ability in mathematics. The topics include: 1 dimensional motion, Newtonian Mechanics, momentum, collisions, explosions, work, energy, power, wave behavior and the nature of light and sound. Understanding is developed through classroom demos, problem solving, discussion and lab work.

Prerequisites: Mathematics 10 and Science 10

Grade Twelve Courses

BIOLOGY 12

(ACADEMIC credit)

Biology 12 explores continuity of life as a central theme. Students will learn about reproduction and development, and study the homeostatic mechanisms of the nervous and endocrine systems within this context. Other topics include heredity and genetics, biotechnology, and evolution through genetic variation. Lab work, class discussion and project work are stressed. This course is recommended for students considering careers in science or science-related fields [e.g. health professions].

Recommended Prerequisites: Biology 11

ADVANCED PLACEMENT BIOLOGY 12

(ADVANCED credit)

AP Biology 12 is a continuation of Advanced Biology 11 (Pre AP). This course gives students the opportunity to earn a full University Biology Credit while still in High School. The topics covered are similar to those in Academic Biology 12 but are studied in greater depth. There is an extensive lab component as well as independent study. The topics include: The Cell Cycle, Sexual Reproduction, Mendelian Genetics, Molecular Genetics, Evolution, and the Nervous, Immune and Endocrine Systems as they relate to homeostasis. The course is recommended for students considering a career in the Life Sciences.

Recommended Prerequisites: Biology 11 or Advanced Biology 11 (Pre AP)

CHEMISTRY 12

(ACADEMIC credit)

The Chemistry 12 course is a continuation of Chemistry 11. Topics include: select Chemistry 11 review, solutions, thermochemistry, chemical kinetics and equilibrium, acids and bases, and electrochemistry. The course will contain approximately 40% laboratory work (which may include an independent research project) to reinforce concepts learned in class. This course is recommended for students who are considering a career in chemistry or who need chemistry 12 for acceptance into a university program.

Recommended Prerequisites: Chemistry 11

ADVANCED PLACEMENT CHEMISTRY 12

(ADVANCED credit)

AP Chemistry 12 is a continuation of Advanced Chemistry 11. The course gives students the opportunity to earn a full University Chemistry Credit while still in High School. In addition to the topics covered in Academic Chemistry 12, the AP Chemistry course covers the topics in greater depth and additional topics are included. Students also engage in a research project and guided inquiry experimentation. Topics include: select Chemistry 11V review, thermochemistry, chemical kinetics and equilibrium, acids and bases, and electrochemistry. This course is recommended for students who are considering a career in science or engineering, who need Chemistry 12 for acceptance into a university program or those with an exceptionally strong interest in Chemistry.

Prerequisites: Advanced Chemistry 11(Pre AP) and Mathematics 11

GEOLOGY 12

(ACADEMIC credit)

Geology 12 is designed to introduce students to the dynamic processes that have shaped and continue to shape our earth. From the origin of the Universe to the asphalt under your feet, this course makes students aware of the connections and importance of Geology in their everyday lives. This course is recommended for students who intend to pursue a career in Geology, and is a course that emphasizes field and lab activities, relying on cooperation and observations. It is therefore also a good general interest course that does not require an extensive science or math background. Some of the topics include Plate Tectonics, Earth's Interior, Mineralogy, The Rock Cycle, Forces and Structures, Geological Time, and Mapping.

Recommended Prerequisite: Science 10

PHYSICS 12

(ACADEMIC credit)

This course is a continuation of Physics 11. The topics include: motion in two dimensions, projectile and circular motion; mechanics and momentum in two dimensions, electricity and magnetism, atomic structure, spectral analysis, nuclear physics, radioactivity, and nuclear energy. Also included are some of the exciting developments in Modern physics such as quantum physics, and the wave/particle duality of matter and energy. This course is recommended for students who have an interest in physics, are considering a career in science or engineering or who need physics 12 for acceptance into a university program.

Recommended Prerequisites: Physics 11 and Mathematics 11

ADVANCED PLACEMENT (AP) PHYSICS 1 ALGEBRA BASED 12

(ADVANCE credit)

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics; dynamics; circular motion and gravitation; energy; momentum; simple harmonic motion; torque and rotational motion; electric charge and electric force; DC circuits; and mechanical waves and sound.

In order to complete the course material and prepare for the AP Physics 1 Exam in early May, students will need to attend additional sessions during the second semester.

Prerequisites: Science 10, Math 10 with strong performance.

SOCIAL STUDIES

Grade Ten Courses

HISTORY 10

(ACADEMIC credit)

This course, which focuses on ancient/medieval history, allows students to develop an understanding of the concept of civilization by examining the origins of civilization and comparing some civilizations that have contributed to the nature of the modern world.

The course has six broad chronological divisions: The Evolution of Human Beings; The Birth of Civilizations (including Mesopotamia, Egypt, China, Africa, and the Americas); Greece; Rome; The Middle Ages; and The Renaissance and Reformation.

HISTOIRE ANCIENNE MED 10 IMM

(ACADEMIC French Immersion credit)

See HISTORY 10 for course description

Grade Eleven Courses

MI'KMAQ STUDIES 11

(ACADEMIC credit)

Mi'kmaw Studies 11 is a course that serves not only to highlight the Mi'kmaw experience, but also to provide opportunities for learners to gain an understanding how they are connected to the history and culture of the First Peoples of the Maritimes. The course incorporates an inquiry-based approach and examines broad concepts such as governance, culture, justice, spirituality, and education. Students will analyse historical and contemporary Mi'kmaw issues, which enables them to achieve a greater understanding of, and respect for, both Mi'kmaw society and Mi'kmaw contributions to Canadian society.

AFRICAN CANADIAN STUDIES 11

(ACADEMIC credit)

This course is an introduction to the experiences of African peoples in North America through the study of history. Students will gain an overview of African history and the African diaspora (dispersal) to the "New World" with a particular emphasis on the African Nova Scotian experience. Students will be equipped with a sound understanding of the experiences, local achievements and contributions of people of African descent. Also, students will discuss the geographical, historical, economic, artistic, literary, political and social experiences, struggles and life stories of a people who have made a significant contribution to world history and culture. This course is open to all students, and will involve input from the community.

African Canadian Studies 11 satisfies the graduation requirement of a Canadian History course at Grade 11.

CANADIAN HISTORY 11

(ACADEMIC credit)

The Canadian History 11 course is organized around five continuing or persistent questions in Canada's history. These are questions of current concerns and have deep historical roots in that previous generations of Canadians have had to address these questions. Their efforts have shaped the development of Canada and its identity. These questions form the basis for five of the six units in the course: Globalization, Development, Sovereignty, Governance and Justice. The sixth unit, Independent Study, provides students the opportunity to engage in a specific piece of historical research. Historiography and the historical method are central to this course as it examines Canada's history from the first peoples in North America to the present.

HISTOIRE DU CANADA 11 IMM

(ACADEMIC French Immersion credit)

See CANADIAN HISTORY 11 for course description

Grade Twelve Courses

GLOBAL GEOGRAPHY 12

(ACADEMIC credit)

Global Geography is a grade twelve course which may be used to satisfy the requirement for successful completion of the high school program. It features eight compulsory units which are based on the standard themes and skills of the discipline of geography. These units are: Our Fragile Planet, Environmental Hazards, The Peopled Planet, Feeding the Planet, Global Resources, Urbanization, and The Future Planet. Each unit is based upon a theme the study of which is fundamental to an understanding of our contemporary planetary condition. In combination, the study of these units should help students answer the key question upon which the course is built: "How did the world arrive at its current state at the close of the 20th century?"

GLOBAL HISTORY 12

(ACADEMIC credit)

This course, which focuses on global history, examines major themes in the history of the post-World War II era. Students examine these themes in five compulsory units: East-West: The Role of Superpower in the Post-World War II Era; North-South: The Origins and Consequences of Economic Disparity; The Pursuit of Justice; Societal and Technological Change; and Acknowledging Global Interdependence: The Legacy of the Twentieth Century. In their study of these units, students examine history from three perspectives – social, economic, and political – and use the research and inquiry skills of the historian.

Throughout their studies, students address the focus question of the course: "Has humanity emerged into a world whose actions are governed more by interdependence at the global level than by dependence or independence at the national or international level?" They also propose reasonable answers to the question upon which Nova Scotia's global studies courses are built: "How did the world arrive at its current state at the close of the twentieth century?"

HISTOIRE PLANETARIE 12 IMM

(ACADEMIC French Immersion credit)

See GLOBAL HISTORY 12 for course description

SOCIOLOGY 12 ACADEMIC

(ACADEMIC credit)

This course is designed to familiarize students with the impact society has on individual behaviour. Students will study a variety of cultures and cultural issues including issues of power and control, racism, crime, and social groups. Students will also gain a better understanding of the role of a sociologist through the development of a research study. The course also utilizes a seminar approach in part where students will be expected to present to their peers a topic chosen by the student in consultation with the teacher. Canadian sociological issues that might be considered include the family, students and schools, poverty, minority groups, women in society, labor and management, conflict, crime in Canada, punishment and rehabilitation, and the future.

SOCIOLOGY 12

(OPEN credit)

This sociology course is designed to give an understanding of the basic aspects of sociology. It allows students to examine Canadian sociological issues and to participate in a local community/sociological project. Canadian sociological issues that might be considered include the family, students and schools, poverty, minority groups, women in society, labor and management, conflict, crime in Canada, punishment and rehabilitation, and the future.

TECHNOLOGY RELATED EDUCATION

Technology related courses are designed to satisfy a wide variety of interests and develop skills in trades and technology. The programs include carpentry, plumbing, electrical, film media, photography, metal work, and green technologies. All courses listed below fulfill the requirements for a technology credit.

Grade Ten Courses

CONSTRUCTION TECHNOLOGY 10

(OPEN credit)

The construction technology course helps develop in students an understanding of construction technology, of its applications related to the basic human need for shelter, of the organization of construction, and of construction's impacts on society. Students will work in groups on activities related to residential dwellings. In performing these assigned tasks students will learn the proper use of equipment, materials and methods required in construction. Problem-solving activities are an integral part of this course.

SKILLED TRADES 10

(Academic Credit)

Skilled Trades 10 models the realities of working in skilled trades professions. The traditional classroom is replaced by a Skilled Trades Centre where students get an opportunity to experience the daily challenges of apprentices. The course provides a unique mixture of classroom and simulated workplace activities. Working with hand tools used by professional trades people, students complete real construction tasks and building projects. The course is divided into 4 main areas: Safety, Skilled Trades Living, Measurement and Calculation, and Tools and Materials.

Skilled Trades 10 is a limited enrolment course.

Grade Eleven Courses

BUSINESS TECHNOLOGY 11

(ACADEMIC credit)

Business Technology 11 introduces students to a range of business productivity software tools and their application. Software will include wordprocessor, spreadsheet, and desktop publishing.

In Business Technology 11, students develop a basic proficiency in touch keyboarding, integrate touch keyboarding skills with skills in document processing and design, create spreadsheets to manage data, apply the principles and practices of desktop publishing to design and produce documents, and become confident and purposeful users of business productivity software.

Business Technology 11 consists of the following modules:

- Module 1: Touch Keyboarding
- Module 2: Document processing
- Module 3: Spreadsheets

- Module 4: Desktop publishing
- Module 5: Business Technology Fundamentals

CONSTRUCTION TRADES 11

(ACADEMIC Credit)

Construction Trades 11 is a continuation of Skilled Trades 10. Students will continue to focus on skills developed in Skilled Trades 10 and will define them in a construction environment. Trades that will be examined comprise: carpenters, plumbers, electricians, painters-decorators, floor installers.

Working in groups, students will develop skills necessary to work on a construction site. Based around a capstone project, each student will actively use the skills specific to each of the trades required to complete the project. Each student will frame, wire, plumb and finish a section of the project.

Emphasis will be placed on communications, job-site safety, and professional trade practices.

TRANSPORTATION TRADES 11

(ACADEMIC credit)

Transportation Trades 11 will continue to focus on the skills developed in pre-requisite Skilled Trades 10 and will further define them in an automotive environment. Trades that will be examined include Automotive Painter, Automotive Service Technician, Heavy Duty Equipment Technician, Motorcycle Mechanic, Motor Vehicle Body Repairer, Partsperson, and Truck and Transport Mechanic.

Students will learn and develop the skills necessary to work in automotive/transportation sector trades.

Continuing inside a culture of safety, emphasis will be placed on professional trade practices and the essential employability skills. Students will anticipate, engage and reflect as they learn.

Prerequisite: Skilled Trades 10

PRODUCTION TECHNOLOGY 11

(OPEN credit)

Production Technology 11 is an introduction to the production process based on custom production. Students will solve real world problems in both the production and computer labs, paralleling today's commercial production. This will give students the opportunity to take part in product planning, product design, product fabrication, product testing, and product analysis. Impact of production on society, individuals, and the environment will also be discussed. By the end of the course students will have had the opportunity to learn about and use various types of hand and power tools, as well as several production machines used in industry today.

Grade Twelve Courses

PRODUCTION TECHNOLOGY 12

(OPEN credit)

Production Technology 12 gives students the opportunity to improve their production skills. The course is based on mass production and the challenges of creating multiple copies of a product without error. This will involve the use and creation of unique templates and guides to ensure quality of work. Students will also look into the reasons why items are mass produced, what factors lead to mass production, and what

factors lead to custom production. By the end of the course students will have been exposed to the various parts of the mass production process and been able to attempt each of them.

FILM AND VIDEO PRODUCTION 12

(ACADEMIC credit)

Film and Video Production 12 involves students in the production of a film or video. Students work independently and as part of a production team to explore roles in the film industry, develop skills required in production roles, develop a critical awareness of historical and cultural aspects of film, and work through the process of producing a film or video from script development to final edit. Modules for this course include Fundamentals, Production Team Skills, Film Industry Disciplines and Careers, and Film Development and Production.

MULTIMEDIA 12

(ACADEMIC credit)

Multimedia is a course that explores the beliefs of a society and its culture through its use of modern media. How do we come to understand what beauty is, what is truth, justice, and success are all questions society is striving to define for itself.

These concepts will be explained through lectures and visual examples. Students will use various computer programs to create visual statements and images around the topics discussed in class.

The focus of the course will be to understand how modern forms of media influence our ideas and beliefs, and ultimately, how we think about ourselves.

This course satisfies the technology requirement.

BUSINESS TECHNOLOGY 12

(ACADEMIC credit)

Business Technology 12 is a computer technology course designed to provide students with the knowledge and skills necessary to use the computer as a tool to augment academic programs and personal or community endeavors. The course will emphasize the use of the computer as a learning tool, as a research tool, and involve facilitation of report/letter writing, organization and manipulation of data, problem solving and presentation skills. The course will make extensive use of word processing, spreadsheet, database and presentation software; use of the Internet as a research tool and the design of web pages. Students will also learn the components of a microcomputer and how to make informed purchasing decisions. Students without keyboarding skills will devote the first 20 hours of the course developing a minimum level of keying speed in order to input data more efficiently during the remainder of the course.

SKILLED TRADES 12 CO-OP

(ACADEMIC Credit)

In Trades 12 co-operative education courses, students will apply and extend their previous learning in work placements. Production, analysis, and reflection will be the major learning outcomes.

HOME TRADES TECHNOLOGY 12

(GRADUATION Credit)

Home Trades Technology 12 is an introduction to the trades and practices related to home construction and renovation. Students will solve real world problems in both the production and computer labs, paralleling today's residential construction. This will give students the opportunity to take part in residential planning, residential design, and residential construction (model). All of the above listed topics will be taught in such a way that they include discussions and assignments regarding waste management, recycling, and "green" construction.

By the end of the course students will have had the opportunity to learn about and use various types of hand and power tools, with an emphasis on jobsite tools. They will have the opportunity to use these tools in the following trades related areas: construction, electrical, and plumbing. Students will also be exposed to basic records keeping for cost and inventory purposes.

***** Sometimes items addressed in the course booklet change before the booklet is updated online. If you have any questions about information in the booklet you should check with administration or guidance.**