

# Course Selection Handbook



Liverpool Regional  
High School

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# LIVERPOOL REGIONAL HIGH SCHOOL

## COURSE SELECTION HANDBOOK 2017-2018

**The information contained in this publication is as accurate as possible at the time of printing. Please be aware that changes to the information contained herein may be necessary due to the number of students selecting courses, the number of staff we will have in the fall, and other changes that may be dictated by the South Shore Regional School Board.**

Parents and students are encouraged to read this handbook thoroughly before completing the registration form. The Course Registration form needs a parent/guardian signature. Any form without a signature will be returned to the student. All course registrations will be completed on-line at school. Course registration forms must be returned no later than \_\_\_\_\_ to \_\_\_\_\_

POWERSCHOOL: Parent/Guardian Portal

You can track attendance, daily bulletins, and marks on-line at <https://sisssrsb.ednet.ns.ca/public/home.html> . If you do not already have your user name and password for access to this site, please contact the school.

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## PRINCIPAL'S MESSAGE



Dear Students, Parents and Guardians,

Selection of courses is an extremely important consideration for students. Primary considerations when choosing your courses are your career aspirations, post-secondary requirements, your ability level, and your personal motivation. The course selection handbook is designed to assist you and your parents/guardians with this very important task.

Please choose your courses carefully. The teachers, guidance counsellor, and administration are available to assist you. Remember, it is you, the student, who is ultimately responsible for the selection. We urge you to consult your parents/guardians and our school staff.

Liverpool Regional High School is pleased to offer a large variety of courses. Please note, however, that some courses may not be offered if there is an insufficient number of students registered, if there are changes in staffing expertise, if there are changes in direction from the Department of Education and Early Childhood Development or if there are reductions in staff due to enrollment decline.

Please make use of the Education Planning Chart on page 8 to map out your selections from year to year and ensure graduation requirements are being met.

I hope that you fill your high school years with lots of fun and wonderful memories. It is also my sincerest hope that you approach high school with the determination and work ethic required to succeed and provide yourself with the education you will need for life beyond these doors. The instruction, guidance and support are available to you. Make good use of it.

Sincerely,

Jeanie Rhodenizer  
Principal

## **REGISTRATION**

The registration process will take place in March/April.

It is suggested you visit the following career planning website and do the interest assessment to help you decide about a career direction and explore the post-secondary requirements: [www.careercruising.com](http://www.careercruising.com)  
username: **liverpoolrhs**                      password: **novascotia**

## **COURSE LOAD**

**Grade 9 courses are pre-determined by the Nova Scotia Department of Education and Early Childhood Development (POEECD), therefore, at this point there is no course selection for grade 9.**

**Students registering for Grade 10 need to register for the following subjects:** English, Math, and Science. It is also recommended that you consider a Fine Arts credit, a Physical Education credit and a Canadian Studies credit. All students in Grades 10 will take **8** courses – **Grade 10 students cannot have prep classes.** There may, however, be extenuating circumstances whereby timetable conflict does not allow a student to have the required eight and therefore must have administration permission to take seven.

**Students registering for Grade 11** are expected to be registered in a minimum of **7** courses.

**Students registering for Grade 12** are expected to register in at least one grade 12 course more than they need to graduate. A student must be registered in a minimum of 2 courses in any semester to be considered a full time student. Grade 12 students, if they require the course to graduate will have priority enrollment in courses.

## **SELECTING YOUR COURSES**

Registration involves the proper selection of courses to satisfy individual needs and abilities. It is extremely important that you consider the following when making selections:

- Courses that will meet provincial graduation requirements
- Courses needed to meet admission requirements to post-secondary. Post secondary institution requirements can change from year to year. Careful examination should be given to course options available and the possible consequences of choosing one course over another. Your future depends on you making appropriate course selections to meet graduation and post-secondary requirements.
- Choose courses that provide academic challenge and success
- Students that do not successfully complete a credit are responsible for making an appointment with the school counselor.
- Carefully read all relevant course descriptions found in this booklet prior to course selections.
- Students enrolled in academic and advanced courses need to be aware of all course requirements, curriculum outcomes and expectations. Students must recognize that expectations in academic and advanced courses are different than graduation/open level courses.

**Responsibility:** An effort is made to support and monitor each student's registration and selection of courses. **However, it is the responsibility of the student and his/her parent/guardian to ensure that graduation and post-secondary requirements are met.**

## **COURSE CHANGES**

**Course selections made in the spring for the next academic year are generally considered your final choices. Course changes may not be made unless:**

1. Timetable conflicts: Students are to select alternate choices carefully on the registration form as the ALTERNATE CHOICES will be used if a conflict occurs. If a student chooses a course in the spring and it does not fit into his/her schedule, and the alternate choices also do not fit, appropriate changes will be made in consultation with the student.
2. Necessary level changes: If a teacher supports or recommends a change in level (such as English 11 to ECM 11), an attempt will be made to make a change. Level changes can only occur if class size and timetable scheduling permits.
3. If a course and its recommended prerequisite are in reverse order, an attempt will be made to correct the student's timetable.
4. A student failed a course and needs to repeat it in order to take the next level or graduate.
5. A referral is made by teachers and/or the School Based Team
6. A course is scheduled for which a credit has already been granted.
7. A student's post secondary plan has changed.

### **Student Initiated Changes:**

Course selection and registration is the result of a process involving the student, parent or guardian, staff and guidance personnel. Normally, students will remain in courses they select for the duration of the semester or school year. A student may inquire about making a change to his/her timetable prior to the beginning of a semester or within the first cycle in a semester (8 school days).

School administration will, however, consider a request by a student to drop a course if the following criteria are met:

- The student has demonstrated academic difficulties in the course
- The student has the support of the teacher, guidance counsellor, administrator, and parent or guardian to drop the course
- The decision to drop does not have a negative impact upon the student's graduation requirements
- The "Request to Drop a Course" form has been completed with all required signatures
- The student must continue to attend class until the student has been officially removed from the course

If the above requirements are met and the student is permitted to drop a course after one week following Mid-term Report, the student is ineligible to receive Honours standing in that year.

## **"PASSING" IN HIGH SCHOOL**

Students' progress through high school by accumulating credits (one credit per course passed). To graduate, a student must successfully complete 18 courses which include specific compulsory credits. Therefore, a student does not pass or fail a grade as such; rather he/she passes or fails a course. As a result, a student may be taking courses from various grade levels.

## **COURSE CODES**

### **Definition of a Credit**

A credit is awarded in recognition of the successful completion of an approved course that would normally be completed in a minimum of 110 hours of scheduled time. Courses are completed when students have met all of the necessary requirements and have demonstrated achievement of the specific curriculum outcomes at an acceptable level. Each high school course is coded by the Department of Education based upon the category of the course and its level of difficulty. The credit types are as follows:

**Advanced (Adv)** – Designed for students who have demonstrated an exceptional degree of academic ability or achievement.

**Academic (Acad)** – Designed for students who expect to enter college, university or other post-secondary institution which requires academic courses. (Note: Not all academic courses meet admission requirements)

**Graduation (Grad)** – Designed for students who wish to obtain a graduation diploma with the goal of proceeding to employment or to a post-secondary program that does not require academic courses. Many but not all of the programs of study at Community College accept these courses.

**Open (Open)** – Courses of this nature are very useful in providing a balanced and well rounded education for all students. Most universities will not accept these courses as credits for university entrance. Most programs at community college that require a graduation diploma will accept these courses.

Note: Check college and university programs to ensure that the credit level is accepted for entrance requirements.

## **HONOURS**

In order to qualify for Honours recognition a student must have completed a minimum of 3 credits in a semester or a minimum of 5 credits for the year. A student will be recognized with "Academic Honours" when he/she has earned an average of 75% in all his/her courses with no mark below 70%. A student will be recognized with "First Class Honours" when he/she has earned an average of 85% in all of his/her courses with no mark below 75%.

## HIGH SCHOOL GRADUATION REQUIREMENTS

You must have a minimum of 18 credits to graduation

Count number of Grade 12 courses (MUST have at least 5) 1 2 3 4 5

Count number of grade 10 credits (Cannot count more than 7) 1 2 3 4 5 6 7

COURSE SECTION	COURSE REQUIRED	COURSE OPTIONS	COMPLETED	#
<b>English (3)</b>	1 credit grade 10	English 10		1
	1 credit grade 11	English Communications 11 English 11, Advanced English 11		2
	1 credit grade 12	English Communications 12 English 12, Advanced English 12		3
<b>Fine Arts (1)</b>	1 credit	Visual Art 10, Music, Art Dra Imm.		4
<b>Math (2)</b>	1 Math 10 credit	Math Ess 10, Math at Work 10, Academic Math 10 **, Math Ext 11 ***		5
	1 Math 11 credit	Math Ess 11, Math at Work 11, Academic Math 11		6
<b>Science (2)</b>	1 Lab Science	Science 10		7
	1 other approved Science credit	Biology, Chemistry, Physics, Oceans, Food Science, Geology		8
<b>Science/Math/Technology (2)</b>	1 credit Sci/Math/Tec	***Extra Math <u>OR</u> Science Course not used above <u>OR</u> Tech Credit: Skilled Trades 10, Con Tec 10, Com Tec 11, Design 11, Bus Tech 11, Pro Tec 12, Film & Vid 12		9
	1 credit Sci/Math/Tec	See Above ***		10
<b>Canadian Studies (1)</b>	1 credit	Mi'kmaw Studies 10/11, Can His 11, Hist Can 11, African Canadian Studies 11		11
<b>Physical Education (1)</b>	1 credit	Physical Education 10, 11, or 12, PAL 11, Yoga 11, Mode de Vie 11		12
<b>Global Studies (1)</b>	1 credit	Gl Geog 12, Gl His 12, His Pla Imm 12		13
<b>Elective 1</b>	1 credit	Any course not already used		14
<b>Elective 2</b>	1 credit	Any course not already used		15
<b>Elective 3</b>	1 credit	Any course not already used		16
<b>Elective 4</b>	1 credit	Any course not already used		17
<b>Elective 5</b>	1 credit	Any course not already used		18
Additional Credit				

\*\*Math 10 (2 credits) 1 credit counted as a Math 10 credit and the 2<sup>nd</sup> counted as a grade 10 credit for one of the Math/Tech/Sci

\*\*\*Math 11 Extended (2 credits) 1 credit counted as a Mat 11 credit and the 2<sup>nd</sup> counted as a grade 11 credit for one of the Math/Tech/Sci

## EDUCATION PLANNING CHART

**Name:** \_\_\_\_\_

**Career Goal:** \_\_\_\_\_

**Educational Program after Completion of High School:** \_\_\_\_\_

**Entry Requirements:** \_\_\_\_\_

1. Select the courses you would like to take for the next year(2), keeping in mind:
  - graduation requirements based on the year you plan to graduate
  - courses available
  - course requirements for education and career goals
  - the Recommended Prerequisite courses
  
2. Write in courses that you are certain about, followed by the more tentative choices. Place a question mark (?) beside the least certain choices.

Grade 10 Credits Planned	Grade 11 Credits Planned	Grade 12 Credits Planned
1 _____	1 _____	1 _____
2 _____	2 _____	2 _____
3 _____	3 _____	3 _____
4 _____	4 _____	4 _____
5 _____	5 _____	5 _____
6 _____	6 _____	6 _____
7 _____	7 _____	7 _____
8 _____	8 _____	8 _____
<b>Total Credits</b> _____	<b>Total Credits</b> _____	<b>Total Credits</b> _____
<b>Other possible courses</b> _____	<b>Other possible courses</b> _____	<b>Other possible courses</b> _____
_____	_____	_____

Questions I would like answered/Additional information I would like to have:

\_\_\_\_\_

## **PROGRAM SUPPORT SERVICES**

Our goal at LRHS is to help each student achieve success. Some students may require adaptations / accommodations which will enable them to meet the provincial outcomes as outlined in Public School Program (PSP). Some students may not be able to meet the curriculum outcomes and therefore may need more individualized planning.

Parents/guardians who feel that their child may need assistance should speak to the teacher, an administrator, school counselor, or resource teacher to discuss their child's individual needs. Education is a partnership and we welcome parent/guardian involvement.

## **INDIVIDUAL PROGRAM PLANS (IPP)**

In some instances, due to the nature or severity of a student's learning difficulties, adaptations will not be sufficient for a student to meet designated curriculum outcomes. Therefore an Individual Program Plan is developed to document how the outcomes for a course were changed for the student. An Individual Program Plan (IPP), when necessary, is developed by a student's Program Planning Team, which may consist of subject teachers, resource teacher, school counselor, an administrator, the student's parents/guardians and where applicable the student. A high school credit obtained with an IPP appears on the student's official transcript with the letters IPP after the course code.

## **DOCUMENTED ADAPTATIONS**

Documented Adaptations (DAs) are used when curriculum is adapted to meet the needs of diverse learners. Teaching strategies, classroom organization, curricular content and assessment and evaluation techniques will be adapted to assist diverse learners in meeting curriculum outcomes. These adaptations are not noted on the student's transcript. The integrity of the curriculum is maintained.

## **THE LEARNING CENTRE**

The Learning Centre provides support services for students who have been identified as requiring additional programming and support to meet their unique needs. It can also be utilized by students when they require a quiet place or support when completing classroom assignments, activities and tests.

## **LEARNING STRATEGIES COURSE(S)**

Learning Strategies course placement is made by recommendation by the school's School Based Team in conjunction with classroom teachers. Please speak to the school counselor or resource teacher for a referral or further information. This course emphasizes goal setting, learning strategies, study, organizational and test taking skills and is individualized depending on student's strengths and needs. Students at the grade 11 and 12 level are asked to sign an agreement that indicates their willingness to use this course as it is designed. Students may earn three (3) senior Learning Strategies credits during their high school years.

## **GUIDANCE**

The guidance department provides services to the students which include individual, educational, and career counselling. Educational and occupational information and speakers, information and presentations dealing with social issues, university, confidential reports, parent-teacher consultations, and orientation of new students are also provided. Students are urged to take advantage of any or all of these services. Please check out Guidance Info on the LRHS Website.

## **SCHOOLSPLUS**

SchoolsPlus was developed by the province to assist children, youth and families in Nova Scotia to succeed in school, as families and within the community.

The goal of South Shore SchoolsPlus Program is to deliver services to families in familiar, comfortable and welcoming locations – their local school. In addition, SchoolsPlus works with community groups, families and organizations, including: health, education, justice, and community services agencies.

## **MENTAL HEALTH SERVICES**

Mental Health Counsellors are available at LRHS on certain days during the week throughout the school year. Referrals can be made by staff, students, and parents/guardians.

## **LEARNING COMMONS**

The L.R.H.S. library is available to students who have study periods. The librarian will help students select material for research and leisure reading. In addition, the library has computers for student use. The library is staffed by one permanent library technician and is open every school day from 7:00 a.m. to 2:00 p.m.

## **OPTIONS AND OPPORTUNITIES (O2)**

This program is developed for students who are capable of meeting regular curriculum outcomes, but may require an alternate pathway. This program also has an important Co-op component which provides opportunities for students to explore work related experiences through local businesses.

Options and Opportunities offers students a hands-on learning experience, designed to help facilitated a successful transition from high school to work, a career path, apprenticeship and or/a post secondary program; including community college or university. O2 is designed to assist students who are capable of participating in the classroom but are seeking alternative options to traditional learning. Traditional classroom, community based learning opportunities, volunteerism, NSCC Test Drive, COOP credits, job shadow and mentorship are just some of the strategies used to help students explore and navigate their future path.

The components of the program involve community learning partnerships, integrated career education and planning, skills for the workplace (industry certifications), expanded course options (Test Drive) and a head start in the trades.

O2 is available to students entering Grade 10. Any interested students must apply for the program in the spring of Grade 9 and go through an interview process. The program is limited to 20 seats.

Students will take electives: Career Development 10, Community Based Learning 10, Career Development 11 (1/2 credit), Workplace health & Safety 11 (1/2 credit) and three co-operative education opportunities in a workplace setting.

St. Mary's offers an O2 Scholarship worth \$2000 renewable for 4 years.

## **COOPERATIVE EDUCATION for O2 and Non-O2 (COOP11a, 12a, 12aTWO academic)**

Cooperative Education courses are unique offerings that give students the opportunity to explore career alternatives while still in high school, by completing 100 hours in a community-based workplace. Students in

the O2 Program (Options and Opportunities) are required to complete three (3) COOP credits to meet requirements for an O2 certificate. Non-O2 students may obtain an academic elective credit by completing a 25-hour pre-placement component before beginning their actual 100-hour community-based work placement. Students wishing to register for a COOP course must complete an application and participate in an interview. Students wishing to take a COOP credit should be mature individuals who can work independently as employees of host employers. Ideal candidates are well-mannered, good communicators, and display an above-average work ethic. The instructor reserves the right to delay a community placement if it is felt the student is not ready.

## **LRHS ALTERNATE HIGH SCHOOL PROGRAM**

This program is available to students in grades 10 to 12. The Alternate Program emphasizes the importance of goal setting and focuses on academic and social/emotional attributes with the ultimate goal of re-integration into regular classes. Please see the principal or vice-principal regarding the referral process.

## **CREDITS ACHIEVED OUTSIDE THE CLASSROOM**

The Nova Scotia Department of Education has made provisions for students to complete some of the graduation requirements outside of the regular classroom.

**1. Personal Development Credit:** The Department of Education's new 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.

Credits will be recognized as long as they are awarded by a group or organization that is recognized by the Department of Education as a Course or Program Provider. In recognizing an organization, the Department of Education 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 ten, eleven or twelve 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.

One of the student's five **elective credits** required for graduation can be a personal development credit, but the student can also have additional personal development credits recorded on his/her transcript as extra credits beyond the thirteen mandatory and five elective credits required for graduation.

Under the new policy, personal development credits can be completed in three areas; Arts, Languages, and Leadership.

Further information for Students and Parents/Guardians can be found in the guide at:

<https://pdc.ednet.ns.ca/parents>

In this guide you will find everything you need to know about Personal Development Credits – what they are, how you can request to have a personal development credit recorded on your high school transcript, and how you can get in touch with the Department of Education if you have questions about credits or approved course and program providers.

Included in the Guide you will find:

1. What are Personal Development Credits?
2. The Different Types of Personal Development Credits
3. Personal Development Credits and Program Planning for High School Students
4. I have a Personal Development Credit, now what?

- 5. Personal Development Credit—Student Notification Form
- 6. Personal Development Credits—Questions and Answers

2. **Nova Scotia Virtual School:** The recently developed N.S. Virtual School provides an opportunity for a limited number of high school students in the SSRSB to complete PSP courses online. Students may possibly be able to do a course on-line if for example they have a conflict in their timetable and need the course to graduate or for post secondary requirements. Students should contact the School Counsellor for more information. Courses that are available for online instruction can be found at: <http://www.nsvs.ednet.ns.ca>

## **COURSE DESCRIPTIONS BY DEPARTMENT**

### **BUSINESS EDUCATION**

#### **Entrepreneurship 12 Academic**

Entrepreneurship 12 focuses on interactive learning and on developing the attitudes, skills, and knowledge required to meet the many opportunities and challenges of being an entrepreneur. The course comprises three components: action, theory, and business planning. Students apply what they learn to organize, operate and manage activities / ventures in strategic areas: school-based activities, business venture (s), mentoring. As well as the 110 hours of classroom time, students are expected to complete a minimum of 50 hours of entrepreneurial activities outside the classroom.

*This course satisfies an elective grade 12 credit requirement for high school graduation.*

### **ENGLISH LANGUAGE ARTS**

Provincial graduation requirements state that students must successfully complete 3 English credits, one each in grades 10, 11, 12. Students intending to go to university must take Academic English. Please check college requirements carefully as some of their programs may require Academic English.

Credit can only be given for one English course in any grade level. If you take English Communications 11 and then take Academic English 11, you will only receive one credit, although both marks will show on your transcript.

	Academic	Graduation
Grade 10	English 10	
Grade 11	English 11, Adv English 11	English Communications 11
Grade 12	English 12, Adv English 12	English Communications 12

#### **ENGLISH 10 Academic**

English 10 will offer you an opportunity to consolidate your learning experiences from your junior high years before you specialize in grade 11. English 10 is designed to expand students’ abilities to speak, listen, write and respond. Emphasis is placed on critical thinking, oral communication and collaborative learning skills. The three strands of English 10 are listening & speaking, reading & viewing, and writing & other ways of representing. Students will be exposed to many forms of communication- oral, written, and visual. Throughout the course, students will explore diverse literary forms (including poetry, drama, fiction, information texts, journals and letters), formulate personal and critical responses to literature and media, and craft formal and informal pieces of writing.

There will be a provincial assessment for English 10.

*This course meets one of the three English requirements needed to graduate.*

## **ENGLISH COMMUNICATIONS 11 - Graduation**

English/Communications 11 is intended to engage students in practical and interesting learning experiences closely related to their lives and to the world they will experience as adults. Students will have the opportunity to read, view and respond to a range of texts in a variety of ways. Planning for this course is based on the three strands of communication: listening & speaking, reading & viewing, and writing & other ways of representing. English Communications 11 allows students to enroll in many community colleges and private college programs or to enter the work force. Prerequisite: Successful completion of English 10.

*This course meets one of the three English requirements needed to graduate.*

## **ENGLISH 11 - Academic**

This course provides an in-depth study of a wide range of literary devices and techniques focusing on the study of literary texts such as novels, poetry, creative writing, oral and written reports, as well as, Shakespeare.

Formal essay writing and research procedures are covered, as well as public speaking techniques. This course is required for students who are considering university studies. Prerequisite: Successful completion of English 10.

*This course meets one of the three English requirements needed to graduate.*

## **ADVANCED ENGLISH 11 - Advanced**

Advanced English 11 offers a challenging curriculum for self-motivated students with a passion for language, literature and learning. It is designed to broaden knowledge, hone skills, and foster initiative, risk-taking, and responsibility through both independent and collaborative learning. It is characterized by enriched content and extended curriculum outcomes. It is a dynamic, fluid classroom where we explore sophisticated texts, independent learning and reflection, extended research projects and a wide range of learning activities and methods. Prerequisite: Successful completion of English 10.

*This course meets one of the three English requirements needed to graduate.*

## **ENGLISH/COMMUNICATIONS 12 - Graduation**

This course is an extension of English/Communications 11. It continues to emphasize students' individual needs, interests, and abilities. It provides experiences which relate to students' lives and to the world they will cope with as adults.

*This course meets one of the three English requirements needed to graduate.*

## **ENGLISH 12 - Academic**

English 12 is a required credit course focusing on literature and written composition. Students will continue to develop skills in the areas of comprehension, interpretation, written and oral expression, research and composition. The course is literature based and includes the study of the novel, Shakespearean drama, poetry and the media. Formal essay writing and research producers are studied. This course is required in order to apply to any university. Pre-requisite - Successful completion of Eng 11-a or Eng 11 adv.

*This course meets one of the three English requirements needed to graduate.*

## **ADVANCED ENGLISH 12 - Advanced**

Advanced English 12 is a required credit course. It is an intensive program of study reflecting high expectations and offering a challenging curriculum for motivated students with a passion for language, literature and learning. Students will continue to develop skills in the areas of comprehension, interpretation, written and oral expression, research and composition. Advanced English 12 includes enriched content, extended curriculum content. It encourages initiative, critical thinking and independent and collaborative learning. Pre-requisite - Successful completion of Eng 11-a or Eng 11 adv.

*This course meets one of the three English requirements needed to graduate.*

## **FAMILY STUDIES**

### **Child Studies 11 Open**

Child Studies 11 is designed to help students explore the meaning and implications of responsible parenthood. Students will acquire current information regarding sexuality, pregnancy, and childbirth. We will also explore how children grow in different ways; physically, socially, intellectually, and emotionally. Students will study real life scenarios on health, safety, nutrition, education, child care, and career opportunities with children. Understanding how children develop will help students apply the appropriate attitudes and skills when caring for children. Units include: Children and Parenting, Pregnancy and Birth, Baby's 1<sup>st</sup> Year, Toddlers(ages 1-3) & Preschoolers(ages 4-6)

*This course satisfies an elective credit requirement for high school graduation.*

### **Canadian Families 12 Open**

Canadian Families 12 provides a foundation for the current and historical issues facing Canadian families today. We will focus on issues faced by families throughout the Family Life Cycle, providing links between the stages and highlighting concerns, controversies, attitudes, changes, and concepts that are relevant at different stages. Units include: Family Matters, Emerging Adulthood, Couple Relationships, Expanding Families & Middle and Later Life

*This course satisfies an elective grade 12 credit requirement for high school graduation.*

## **FINE ARTS ( Visual Art 10, Music Band, Music Guitar)**

**To graduate and receive a high school diploma, all students must have at least one Fine Arts credit.**

### **Music 10 Guitar Academic**

This guitar course is designed for musicians from beginner to advanced. Students will learn to play guitar, the music theory concepts required to read and understand guitar, and the role guitar has played in the historical development of music. The curriculum is divided into three curriculum strands: Creating, Making and Presenting, Understanding Contexts of Time, Place and Community, and Perceiving, Reflecting and Responding.

*This course satisfies the compulsory Fine Arts credit requirements for high school graduation.*

## **Music 10 Band Academic**

This course is designed for band students who have prior experience in band and are a part of the band program at LRHS. Students will participate in full band rehearsals and performances while also receiving instruction in music theory and history. *Please note that much of this course is held outside of school hours during rehearsal time and attendance is required outside school hours.* Advanced Students: Students who are advanced in band performance and theory may be able to complete the requirements for Music 11 or Music 12 credit. This decision will be made in consultation with the student by the music teacher and administration.

*This course satisfies the compulsory Fine Arts credit requirements for high school graduation.*

## **Music 11 Academic**

This course is designed for musicians of any instrument or voice with some experience in making and reading music. Students will learn to perform on an instrument or vocally, the music theory concepts required to read, write and understand music notation and the role music plays in historical and social. The curriculum is divided into three curriculum strands: Creating, Making and Presenting, Understanding Contexts of Time, Place, and Community, and Perceiving, Reflecting and Responding. **Recommendation:** Must have Music 10 or be approved by the music teacher and administration.

*This course satisfies the compulsory Fine Arts credit requirements for high school graduation.*

## **Music 12 Academic**

This course is designed for musicians of any instrument or voice with extensive experience in making music. Students will learn to perform on an instrument or vocally, the music theory concepts required to read and understand music notation, and the role music plays in their lives. The curriculum is divided into three curriculum strands: Creating, making and Presenting, Understanding Contexts of Time, Place, and Community, and Perceiving, Reflecting and Responding. **Recommendation:** Must have Music 11 or be approved by the music teacher and administration.

*This course satisfies the compulsory Fine Arts credit requirements for high school graduation.*

## **Visual Arts 10 Academic**

Students will explore art through experience in making art in a variety of media: drawing, painting, collage, paper mache, sculpture and design. Students will appreciate design principles in their own art, and historical pieces of art. This course is designed to increase student's perceptual ability, technical artistic skill and awareness of art as an accessible expressive tool. It concentrates on developing basic art skills and understanding in the concepts involved.

*Visual Arts 10 satisfies the compulsory fine arts credit requirement for high school graduation.*

## **FRENCH IMMERSION**

**French Immersion:** Students are eligible for a French Immersion certificate if they complete 9 credits towards graduation in French. These credits must include 3 French Immersion language arts credits + 6 other courses offered in French.

The following French Immersion courses are listed in the year each is usually taken. \*Please note: The order in which these courses are offered may change from year to year.

**Grade 10**

Français 10  
 Math 10 (2)  
 Art Dramatique 10  
 Mode de Vie Actif 11

**Grade 11**

Français 11  
 Histoire Canadienne 11

**Grade 12**

Français 12  
 Histoire Planetaire 12

**Français Immersion 10 Academic**

Students will develop skills required for effective communication. The course will contain literary and non-literary components. Students will study short stories, poetry and plays. One or two novels will be studied. Students will work with media, interviews, writing, technologies and a variety of forms of oral presentations. French is spoken at all times in this class.

*This course satisfies an elective credit requirement for high school graduation.*

**Français Immersion 11 Academic**

Students will continue to develop skills required for effective communication. The course will contain literary and non-literary components. Reading and literature will include advertisements, magazine and newspaper articles, poems, tales and legends. One or two novels will be studied. Students will work with media, writing, technologies and a variety of forms of oral presentations. French is spoken at all times in this class.

*This course satisfies an elective credit requirement for high school graduation.*

**Français Immersion 12 Academic**

Students will continue to develop more advanced skills required for effective communication. The course will contain literary and non-literary components. The production of oral reports, reading and literature are still part of the course. One or two novels will be studied. Writing opinion letters, C.V. and presentation letter and the use of technologies will be part of this class. French is spoken at all times in this class.

*This course satisfies an elective grade 12 credit requirement for high school graduation.*

**Drama Immersion 10 Academic**

Drama 10 is an introductory course in Drama and is not a course that trains actors or leads to a production of a play. Students will explore the use of drama techniques. Improvisation, movement, dialogue and other basics of theatre will be studied. Students are encouraged to display creativity, take risks and to work individually as well as in groups. French is spoken at all times in this class.

*This course satisfies the compulsory Fine Arts credit requirements for high school graduation.*

**Histoire Planetaire 12 Academic**

Global History utilizes multiple perspectives to investigate and analyze the central question- How our world arrived at its current state? This course will look at the major historic topics that have shaped our planet since World War II. Some major topics will include various global dynamics such as geopolitical power, Societal Change, Justice and Economic Disparity, Ideologies, the Cold War, North-South, East-West. In the study of these topics students will examine the impacts they have had on our changing world.

*This course may be used to fulfill the required Global Studies credit for high school graduation.*

## **Math 10 Academic**

Math 10 students 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 mathematic.

## **Mode de Vie Actif 11 Immersion Academic**

This 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 the community. Physically Active Living 11 encompasses both an activity component and a theory component, with an emphasis on engagement in physical activity.

*This course may be used by students in to fulfill the compulsory Phys. Ed. requirement.*

## **LANGUAGES**

### **Core French 10 Academic**

Through a variety of activities students will be able to review French functions and build vocabulary as well as develop grammatical elements learned in junior high and elementary. Students will be encouraged to participate fully in the French classroom in a variety of activities including games, interviews, plays, global stimulations and projects.

*This course satisfies an elective credit requirement for high school graduation.*

### **Core French 11 Academic**

Through interaction and collaborative learning students will be able to review French functions and build vocabulary as well as develop grammatical elements learned at the grade 10 level. There will be a novel study and activities during class time provide students with a chance to practice their French skills. Students will be encouraged to participate fully in the French classroom in a variety of activities including games, interviews, newspapers, films, and projects. Pre-requisite: Core French 10 or equivalent.

*This course satisfies a grade 12 elective credit requirement for high school graduation.*

### **Core French 12 Academic**

Through interaction and collaborative learning students will be able to master French functions and build vocabulary as well as develop and master grammatical elements learned at the grade 11 level. There will be a novel study, written reports, using French in the workplace and activities to make students capable to speak French in a spontaneous manner. Pre-requisite: Core French 11 or equivalent

*This course satisfies an elective credit requirement for high school graduation.*

## MATHEMATICS

### General comments

- Because of the number of courses required to study calculus at post secondary, it is extremely important that the students consult a counsellor early in their high school years to be sure they have the required courses necessary for future studies.
- Homework is an essential component to success in senior high mathematics. Students of all levels are expected to do **at least a half hour** of homework in their math courses prior to each class.
- Students in academic and advanced math programs are expected to own a graphing calculator. (Suggested brand – TI-83 plus) If students are unable to purchase their own calculators they may be able to borrow one for the semester from their math teacher.
- For students entering grade ten in September 1997 or later, a minimum of two math credits are required for graduation.

Liverpool Regional High School offers a variety of mathematics courses. Students' choices should be based on: Mathematical knowledge and background, Future/Career Plans, Interest, Learner Profile, Previous Mathematics Experience.

1. It is in the students' best interests to select courses in which they are able to be appropriately challenged and are likely to experience success.

2. Use this table as one tool to help you when choosing a Math course for September 2017:

	Entering Grade 10 in Sept 2017 or do not have a grade 10 Math credit	Entering Grade 11 in Sept 2017	Entering Grade 12 in 2017
It is critical that you take Math 11 and Pre-Cal 11 in your grade 11 year` if you plan to take Pre-Calculus 12		Math 11 And Pre-Cal 11	Pre-Calculus 12 and/or Calculus 12
A student intending further study involving an intensive level of mathematics, sciences, and engineering take.....	Math 10 (Academic)	Math 11 And Pre-Cal 11	Pre-Calculus 12 and/or Calculus 12
A student intending further study beyond high school and is required by many programs at universities and community colleges.....	Math 10 (Academic)	Math 11 (Extended)	Math 12 (Academic)
A student plans to enter the job market, or plans to attend a post-secondary institution <i>not requiring Academic or an Advanced Math</i> , and who has struggled with Math.....	Math at Work 10 (Graduation level)	Math at Work 11 (Graduation Level)	Math at Work 12 (Graduation Level)
A student who has not met Grade 9 outcomes.	Math Essentials 10	Math ESS 11	Math ESS 12

**It will no longer be possible to take these courses out of sequence or concurrently.**

### **Mathematics Essentials 10 is**

- a 110 hour, graduation, 1 Math credit
- 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.
- Students 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.
- Designed for students who have not been able to achieve grade 9 outcomes.
- **There will be no provincial assessment for Mathematics Essentials 10.**

### **Mathematics at Work Pathway (non-academic)**

These new 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.

Mathematics at Work 10 is

- a 110 hour, graduation, 1 Math credit course
- a high school mathematics course which demonstrates the application and importance of key math skills.
- Students will explore the following topics: measurement, area, Pythagorean theorem, right triangle trigonometry, geometry, unit pricing and currency exchange, income, and basic algebra.

**\*\*There will be a provincial assessment for Mathematics at Work 10\*\***

### **Mathematics 10 (Academic) Pathway**

Courses in this pathway are designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that require an academic mathematics credit but do not require the study of pre-calculus or theoretical calculus.

Students who complete Mathematics 10 typically may complete Mathematics 11 followed by Mathematics 12, if they intend to follow the academic pathway.

- **Mathematics 10:** an academic high school mathematics course which is a pre-requisite for all other academic and advanced mathematics courses.
- is a 220-hour, academic, 2-credit course. This will mean that students will have mathematics class every day for their grade 10 year.
- Two Grade 10 credits will be awarded
- 1 academic mathematics credit

**1 of the two additional credits in “science, mathematics and/or technology”**  
**\*\* There will be a provincial assessment for Mathematics 10.**

Math 10 students 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.

## **Advanced Math Pathway**

### **Pre-Calculus and Calculus Pathway for Post-Secondary Studies**

Complete Mathematics 11, followed by Pre-Calculus 11, followed by Pre-Calculus 12 and then Calculus 12, if they intend to follow the advanced pathway. It will no longer be possible to take these courses out of sequence or concurrently.

Courses in this 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.

**Students who follow this advanced mathematics pathway will be required to complete the 220-hour Mathematics 10 course in their grade 10 year and both Mathematics 11 and Pre-Calculus 11 in their grade 11 year.**

Students will explore the following topics: algebra and number, measurement, relations and functions, combinatorics, and introductory calculus.

### **Mathematics Essentials 11**

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. The typical pathway for students who successfully complete Mathematics Essentials 11 is Mathematics for the Workplace 12.

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 3D design, mathematics in content areas such as science and social studies.

Pre-Requisite: Successful completion of Mathematics Essentials 10 or Mathematics for the Workplace 12.

*This course will fulfill one of the two mathematics course requirements for graduation.*

### **Math at Work 11**

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

Pre-requisite: Successful completion of Mathematics at Work 10 or Mathematics 10.

*Mathematics at Work 11 satisfies one of the two mathematics credit requirements for high school graduation.*

### **Mathematics 11 (semestered)**

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

*This course will fulfill one of the two mathematics course requirements for graduation.*

### **Math 11 Extended**

This course will be presented as a 220-hour course

Prerequisite: Successful completion of Mathematics 10

Extended Mathematics 11 satisfies the prerequisite for mathematics 12. The majority of students who take Extended Mathematics 11 will pursue the academic pathway and continue on to Mathematics 12 in their grade 12 year. While studying the topics in an academic mathematics course, Extended Mathematics 11 will allow more time for students to activate prior knowledge, solidify skills and concepts, engage deeply in tasks and projects, and consolidate their understanding.

Students in Extended 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, quadratic functions, careers, and big data/data analytics. This extended course has a pacing that will permit students to spend additional time on topics and to look at related areas of study.

*This course will fulfill one academic mathematics credit and one technology credit for graduation.*

## Pre-calculus 11

Pre-calculus 11 is an advance 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 pre-requisite 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.

## Mathematics Essentials 12

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

**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.

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 and project oriented.

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

## Mathematics at Work 12

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

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

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 study the following topics:

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

### **Mathematics 12 Academic**

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

**Prerequisite:** Successful completion of Mathematics 11 Extended 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.

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

### **Pre-calculus 12**

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

**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.

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 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

## **Calculus 12**

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

**Prerequisite:** Successful completion of Pre-calculus 12.

This course includes the following topics: the concept of a limit, simple derivatives, properties of derivatives, derivatives of trigonometric, exponential and logarithmic functions, applications of derivatives – tangents, rates of change, motion, curve sketching, anti-derivatives, differential equations and applications of anti-derivatives.

## **PHYSICAL EDUCATION**

### **Physical Education 10 Open**

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

*This course satisfies the compulsory Phys. Ed. credit requirement for high school graduation*

### **Physical Active Living 11 Open**

Physically Active Living 11 is offered to students who would like to increase their awareness of physical activity for their own personal benefits. Each student will increase their fitness levels and understand the importance of maintaining an active and healthy lifestyle for the present and the future. Students will learn the importance of community involvement and the facilities offered in the area. Physically Active Living 11 includes four modules: Active Lifelong Pursuits, Community Participation, Personal Fitness and Goal Setting, and Healthy Living.

*This course satisfies the compulsory Phys. Ed. credit requirement for high school graduation*

### **Physical Education 11 Open**

The Grade 11 Physical Education course emphasizes education for healthy lifestyles, an understanding of sport in today's society, and an overall improvement in oneself. Athletic skill or previous involvement is not

essential. Students will learn through participation in activity, discussions and theory class, and practical experiences involving leadership roles. All activities require proper gym attire and participation.

*This course satisfies the compulsory Phys. Ed. credit requirement for high school graduation*

### **Physical Education 12 Open**

Physical Education 12 is a continuation of Physical Education 11 with a stronger emphasis on leadership.

Leadership roles will be developed through creating and presenting various physical education and sport activities, along with the design/assistance of intramural activities.

Topics covered during classroom sessions include: fitness, nutrition, sport and society, athletic injuries, and basic anatomy and physiology.

Activity classes cover topics such as: activity based leadership, fitness activities, team games, and individual sports. For gymnasium activities, proper physical education attire will be required and participation is mandatory.

*This course satisfies the compulsory Phys. Ed. credit requirement for high school graduation*

### **Yoga 11 Academic**

Yoga 11 will introduce students to various styles and characteristics of yoga. It is an expectation that students will develop a lifelong personal practice of yoga for personal fitness and recreation. Students will be participating in a variety of activities that will include both physical and classroom theory. The physical practice of yoga will include learning, developing, and practicing skills that involve strength, flexibility, endurance, balance, poise, regulation of energy, and mental focus, all of which can be applied to other physical activities. Classroom sessions educate students about the relationship between nutrition and fitness, the history and philosophy of yoga including values of non-violence, ethics, honesty and respect in the context of challenging physical activity. This course is a specialized variant of Physical Education 11 that is open to student from all grade levels.

*It meets the requirements for a physical education credit for all students. This course has no pre-requisite.*

## **SCIENCES**

### **Biology 11 Academic**

Biology 11 emphasizes the science themes: change, diversity, energy, equilibrium, matter, and systems. These themes provide a means of showing the connections within the science program and provide a framework for teachers to show students how individual sections of the program relate to the big ideas in science.

Biology 11 consists of the following units:

Unit 1: Matter and Energy for Life - Introduces cells as the basic unit of life, and investigates the role of cell structures in matter exchange and energy flow.

Unit 2: Biodiversity- Provides an overview of life's diversity and unity by using organized systems for their classification and study.

Unit 3: Maintaining Dynamic Equilibrium I - Investigates various body systems and the role they play in maintaining an organism's constant internal state.

Unit 4: Interactions among Living Things- Investigates the biotic and abiotic factors of ecosystems and how they interact to affect population change and energy flow.

Recommended Prerequisites: Science 10

*This course satisfies one of the compulsory science credit requirements for high school graduation.*

### **Biology 12 Academic**

Biology 12 emphasizes the science themes: change, diversity, energy, equilibrium, matter, and systems. These themes provide a means of showing the connections within the science program and provide a framework for teachers to show students how individual sections of the program relate to the big ideas in science. Biology 12 consists of the following units:

Unit 1: Maintaining Dynamic Equilibrium II- Investigates the role of chemical and electrochemical systems in the regulation of homeostasis.

Unit 2: Reproduction and Development- Investigates the reproductive process at the cellular and multi-cellular level.

Unit 3: Genetic Continuity: Investigates the structure and function of DNA, as well as basic genetics to study how genes are transmitted from one generation to the next. The effect of mutations, genetic diseases and genetic engineering is also explored.

Unit 4: Evolution, Change and Diversity: Investigates evidence that supports the theory of evolution, and an analysis of various evolutionary mechanisms.

Biology 11 is not a prerequisite for Biology 12, however Biology 11 is a recommended pre-requisite and administration approval is required to take Biology 12 if you do not have Biology 11.

*This course satisfies one of the compulsory science credit requirements for high school graduation.*

### **Chemistry 11 Academic**

This is an introductory course into chemistry consisting of the following units:

Unit 1: Stoichiometry: This unit deals with the mole and molar conversions, calculations based on balanced chemical equations and various stoichiometric applications such as percentage yield and percentage purity.

Unit 2: From Structures to Properties: Students study ionic, molecular and metallic bonding in substances. They learn how to, classify compounds and determine the polarity of molecules and types of bonding, Shapes of molecules are also studied using the VSEPR theory.

Unit 3: Organic Chemistry: This is the study of molecular compounds of carbon. Students learn how to write and name various carbon compounds and study their physical and chemical properties. Chemical reactions involved in all compounds are also studied.

Prerequisite: SCI 10-a, Math 10-a

*This course satisfies one of the compulsory science credit requirements for high school graduation.*

### **CHEMISTRY 12 Academic**

Unit 1: Thermo chemistry: This is the study of heat involved in chemical reactions. Different methods are used to study heat, such as, bond energies, heats of formation and combustion and experimentation.

Unit 2: Solutions, Kinetics, Equilibrium: This unit looks at solutions, their properties and solubility. Rates of reaction (kinetics) and solution equilibrium ( $K_a$ ,  $K_b$  and  $K_w$ ) are also studied.

Unit 3: Acids and Bases: New definitions for acids are introduced in unit three. They are then used in chemical reactions and equilibrium concepts. Students will further study acids and bases using titrations and LeChateliers principle.

Unit 4: Electrochemistry: Energy involved in chemical reactions is studied in this unit using various methods, such as oxidation/reduction potentials and redox half reactions. Electrochemical and electrolytic cells are also analyzed.

Prerequisite: CHE 11-a

*This course satisfies one of the compulsory science credit requirements for high school graduation.*

### **Food Science 12 Academic**

Food Science 12 is the study of producing, processing, preparing, evaluating and using food. This is not a cooking class. Topics include safety in the lab, food science, society and development, chemistry of food, nutrients and food processing. Evaluation includes: tests, lab reports, a variety of individual and group assignments and class participation.

*This course satisfies not the first but the second science requirement for high school graduation.*

### **Geology 12 Academic**

This course has been designed to engage and meet the needs of a wide range of learners.

Geology 12 is the study of the Earth. Topics include: The Nature of Geology, Earth Materials, the Earth's Interior, Topography, Environmental Geology and how Geology relates to the Earth's past, present and future.

*This course satisfies not the first but the second science requirement for high school graduation.*

### **Oceans 11 Academic**

Oceans 11 is a science course intended to enable students to develop a general scientific background and relevant knowledge base about the impact, importance, and interactions we have with oceans. Oceans 11 offer students opportunities to explore aspects of global and local oceanography and current related issues. The course is divided into four units:

Unit 1: Structure and Motion: In this unit you explore topographic features of the ocean floor, currents and tides.

Unit 2: The Marine Biome: In this unit you will explore the biodiversity of ocean life, the function of the marine biomes, connections between humans and the ocean, habitats of marine organisms and marine zonation.

Unit 3: Aquaculture: In this unit, we will investigate aquaculture practices in Nova Scotia, describe and identify organisms raised though aquaculture, and explain the ecology of cultured species grown in our local waters.

Unit 4: Fisheries Management: In this unit, we will investigate the importance of the fisheries as a resource, and the dynamic relationship between physical environment, biological environment and the health and distribution of a fish stock.

*This course satisfies not the first but the second science requirement for high school graduation*

## **Physics 11 Academic**

This is the first part of a two year program that introduces students to the study of Physics. The general topics covered include motion, forces, energy, and waves. Students who do well in this class tend to have a strong Math background and good work ethic.

Recommended Pre-requisites: Science 10 and Math 10.

*This course satisfies one of the compulsory science credit requirements for high school graduation.*

## **Advanced Physics 11**

Advanced Physics 11 takes an investigative approach to studying physics. Students are expected to engage in opportunities to develop major concepts in physics and to demonstrate and apply these concepts in new and novel contexts. The content topics for this course should parallel those of Physics 11 but should provide for greater depth of treatment.

Prerequisite: Science 10 and Math 10.

*This course satisfies one of the compulsory science credit requirements for high school graduation.*

## **Physics 12 Academic**

This is the second part of a two year program that explores more complex areas of Physics. Topics include 2-dimensional motion, simple harmonic motion, gravitational and electrical fields, modern physics and nuclear physics. Strong mathematical skills and communication skills as well as consistent independent study skills and an analytical mind are required.

Prerequisite: Physics 11

*This course satisfies one of the compulsory science credit requirements for high school graduation.*

## **Advanced Physics 12**

Advanced Physics 12 is a continuation of Advanced Physics 11 course. In addition to exploring the topics from Physics 12, students will engage in a major individual research project.

Recommended Pre-Requisites: Physics 11 or Advance Physics 11; Mathematics 11 or Pre-Calculus 11

*This course satisfies one of the compulsory science credit requirements for high school graduation*

## **Science 10 Academic**

Science 10 is a hands-on course for all students which focuses on curriculum outcomes and skills, with the goal of developing scientific literacy by providing the attitudes, skills, and knowledge students need to develop inquiry, problem-solving, and decision making abilities. This is accomplished by offering diverse learning experiences that provide opportunities to explore and understand the interrelationships among science, technology, society, and the environment. These outcomes are addressed in four units: Weather Dynamics, Chemical Reactions, Motion, and Sustainability of Ecosystems.

*This course satisfies one of the compulsory science credit requirements for high school graduation*

## **SOCIAL STUDIES**

### **African Canadian Studies 11 Academic**

This course is designed to give students a comprehensive understanding of the global experience, local accomplishments and contributions of Canadians of African descent. The course is divided into four basic units:

- 1) Pre-colonial African society;
- 2) Transcontinental evolution and change of the African diaspora;
- 3) Pursuit of political and economic empowerment and
- 4) Current issues and challenges facing African Nova Scotia.

*African Canadian Studies 11 fulfills the compulsory Canadian History credit required for graduation.*

### **Canadian History 11 Academic**

Canadian History is a themed approach to learning more about the triumphs, challenges, and issues of our country's history around the topics of Globalization, Development, Governance, Sovereignty, and Justice. This course requires students to look critically at various types of historical sources as they pursue deeper understanding of the basic concepts, ideas, people, and events they have learned about in previous grades. The development of research and writing skills are important targets in this course.

*This course may be used to fulfill the required Canadian Studies credit for high school graduation.*

### **Global Geography 12 Academic**

Global Geography is designed to examine and analyze world impacting issues and trends, from multiple cultural perspectives. Students will learn and apply the geographic inquiry method to study important global concerns such as demographics, resource allocation, sustainability, justice, poverty and environment.

*This course may be used to fulfill the required Global Studies credit for high school graduation.*

### **Global History 12 Academic**

Global History utilizes multiple perspectives to investigate and analyze the central question- How our world arrived at its current state? This course will look at the major historic topics that have shaped our planet since World War II. Some major topics will include various global dynamics such as geopolitical power, Societal Change, Justice and Economic Disparity, Ideologies, the Cold War, North-South, East-West. In the study of these topics students will examine the impacts they have had on our changing world.

*This course may be used to fulfill the required Global Studies credit for high school graduation.*

### **Law 12 Academic**

The Law 12 course is designed to create a basic understanding of the history and structure of Canadian Law, including legal practice, criminal law, family law and contract law. An exploration of past and current legal cases allows the students to develop a broad understanding of the role of Law in their lives and the nature of law in other countries. This is a dynamic and interactive course which attempts to develop a context of law in the students' current and future lives.

*This course may be used to fulfill a grade 12 elective credit for high school graduation*

## **Mi'kmaw Studies 11 Academic**

The purpose of Mi'kmaw Studies 11 is to allow students to explore the "...perspectives and experiences of First Nations People." (Mi'kmaw Studies 11 Curriculum Guide). Mi'kmaw Studies 11 is designed to meet the educational needs of a wide range of learners and to accommodate their various intelligences and learning styles. The course is designed to inform and challenge students of both Native and non-Native backgrounds. Students will examine "Mi'kmaw history, culture and the contributions to Nova Scotian Society..." in an attempt to "...gain an understanding of values, spiritual beliefs, and world views of the Mi'kmaw people..." Students will adopt a Native-centric perspective on maritime history in that they will be looking at history through the eyes of the Mi'kmaw people. MI'K ST 11 is an outcomes-based course that encourages students to demonstrate their learning in a wide variety of ways. This course fosters a supportive environment in which risk-taking, open-mindedness and creativity are expected.

*This course may be used to fulfill the required Canadian Studies credit for high school graduation.*

## **Sociology 12 Academic**

Sociology explores the scientific study of human interaction and the knowledge that has accumulated through that study. Sociology 12 provides a basic understanding of this social science through examination of Canadian sociological issues surrounding topics such as research, culture, crime and deviance and group behaviors. In addition to learning about sociology, students will come to appreciate ways of thinking about human interaction.

*This course may be used to fulfill a grade 12 elective credit for high school graduation*

## **Sociology 12 Open**

Sociology explores the scientific study of human interaction. Sociology 12 (Open) is designed to give an understanding of the basic aspects of sociology. Students will examine Canadian sociological issues and participate in a local community/sociological project. Issues studied include sociological research, group behavior, culture, and crime and deviance. Students enrolled in English Communications 12 should consider this level of Sociology.

*This course may be used to fulfill a grade 12 elective credit for high school graduation*

## **TECHNOLOGY RELATED EDUCATION**

### **Business Technology 11 Academic**

Business Technology 11 introduces students to a range of business productivity software tools and their application. Software will include word processor, spreadsheet, and desktop publishing. Students will develop a basic proficiency in such keyboarding, examine document processing and design, create spreadsheets to manage data, and apply principles and practices of desktop publishing to design and produce documents.

*This course may be used to fulfill a technology credit requirement for high school graduation.*

## **Communication Technology 11 Academic**

This course will consist of content and activities dealing with the orientation to communication technology. It will focus on the following modules: computer applications; electronic communication (i.e. streaming audio; design, drawing and sketching (graphic communication); screen printing; video production; photography - both black and white (dark room), as well as digital; and robotics (Lego Mindstorms).

*This course may be used to fulfill a technology credit requirement for high school graduation.*

## **Construction Technology 10 Open**

The construction technology course helps develop in students an understanding of construction technology, or its applications related to the basic human need for shelter, of the organization of construction and of construction's impacts on society. This course is designed to instruct fully the basic details of house construction. It will provide aspects of the construction industry for those who want to take up a construction trade or for those who want some practical knowledge for use around the home.

*This course may be used to fulfill a technology credit requirement for high school graduation.*

## **Design 11 Academic**

A designer's power to engage is limitless. We are inundated by messages on a daily basis. Design 11 examines media, the impact and message of the media and explores the tools (technologies) of the trade. Using these technologies, students will develop real world solutions to various design challenges. Students will explore the importance of time and project management as they consider the impact of their design in a cultural, social and economic context. Modules for this course are as follows: Design Fundamentals, Design in the Built Environment, Communications Design, Product Design and Design Project.

*This course may be used to fulfill a technology credit requirement for high school graduation.*

## **Film and Video Production 12 Academic**

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.

*This course may be used to fulfill a technology credit requirement for high school graduation.*

## **Production Technology 12 Open**

Production Technology will focus on the ways in which products are produced using a variety of materials and methods. It will cover the areas of custom production and mass production. The business end of each area will be explored as well as how the products are produced.

*This course may be used to fulfill a technology credit requirement for high school graduation.*

## Skilled Trades 10 Academic

Skilled Trades 10 is a career exploration course suitable for all students in grade 10 and above. The course provides students with a unique mixture of classroom and simulated workplace activities. These activities enable students to experience in a very visceral way what life and learning in the skilled trades feels like. The course is delivered in a special learning environment. The topic areas of study are skilled trades living, safety, measurement and calculation for trades and tools and materials of the skilled trades.

*This course may be used to fulfill a technology credit requirement for high school graduation.*

## **POST-SECONDARY INFORMATION**

Post-secondary institutions include universities, private colleges, technical schools, and community colleges. Entrance requirements for various programs differ from one institution to another. **It is highly recommended that you visit the various websites of these institutions and check out admission requirements.**

Out of Province Universities and Colleges have specific requirements that may differ from university or colleges in Nova Scotia. It is important to visit the institution that you may be interested in attending to ensure you are taking the correct courses.

### **University Entrance Requirements**

Students must realize that requirements for different universities vary considerably and are constantly changing. Therefore, students must make themselves aware of both academic and other acceptance criteria. Most universities demand five university preparatory subjects at the grade 12 level for entrance, one of which must be ENG 12-A. Many programs also have more specific requirements.

In most cases Graduation/Open Courses cannot be used as credits toward fulfilling university entrance requirements. Universities differ in their acceptance of some courses (eg. Law 12-A, Sociology 12-A).

### **Community College Requirements**

Students should note that requirements stated by Community Colleges are minimum requirements. Seats in Community Colleges Programs are in high demand. The better prepared you are, the better your chances for gaining admittance. Most community college programs are now one or two years and require a high school completion certificate for admission. Some programs have more stringent academic requirements. You can visit the NSCC website for specific admission requirements.

#### *Apply in Grade 11*

NSCC now accepts applications from Grade 11 students who have a clear understanding of their future career goals. Students can now apply anytime in their grade 11 year. Once in grade 12, you will need to submit your transcript prior to September 30.

#### *Test Drive NSCC*

Test Drive is designed for high school students in grade 11 or 12 who are exploring full time programs. To find out more about test drive go on-line to NSCC-Test Drive. Test Drive is an opportunity to decide if the college provides the right learning environment for you.

**The ultimate responsibility for course selection rests with the students and the parents/guardians**